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EDITORIAL

This issue introduces two revisions in the format of the Journal. The first change has to do with the arrangement of articles. Previously articles were grouped under major headings such as Brief Reports, Case Study, and Summaries. Beginning with this issue, all articles will be arranged alphabetically by author and those articles of a special character such as a Case Study or a Summary will have the appropriate notation in parenthesis after the title of the article. Book Reviews will continue to be listed as a separate group following articles and will be followed by the Newsletter and Announcement sections. This change has been instituted because over a period of time it has become evident that there has not been a consistent flow of the special articles with the result that is has frequently been necessary to alter the over-all format to conform to the articles available. With the new format, the arrangement will be consistent and yet permit ready identification of the special articles.

The second change deals with the format of the references to literature made in articles and listed at the end of each article. The method which has been in use was introduced because it provided the reader with immediate information as to the author and date of publication mentioned. In addition, for editorial purposes this method had the advantage that changes in the list of references could be made at the last moment of printing with a minimum of effort. In actual practice it has been found that corrections in the list of references have been so few as to make this advantage a negligible one so that the advantage to the reader remained the one gain. On the other hand, most Journals are now conforming to the publication manual which has been issued by the American Psychological Association. The Editorial Committee gave careful and detailed consideration to the question of conformity and came to the conclusion that the advantage of uniformity in the field of psychological publication warranted the present change to conform to the format of the publications of the American Psychological Association. Such uniformity offers advantages to both the reader and the author. For the former, uniformity means that notations of references from a variety of Journals will be the same. Even with our previous method the reader must turn to the reference list for a more complete reference. For the author there is the marked advantage that in the case of a rejected manuscript uniformity will eliminate the necessity of having a manuscript re-typed in order to submit it to another Journal.

The Editorial of the previous issue mentioned the resignation of Dr. Evelyn Troup and Mrs. Winifred Lucas. We are pleased to announce the appointment of Dr. John Weir, formerly an assistant editor, to one of the vacancies of associate editor and the appointment of Dr. Irla Lee Zimmerman as an assistant editor. The remaining vacancies will be filled in the near future.

THE EDITOR

INTRODUCTION TO THIS ISSUE

SUSAN K. DERI

The fact that an issue of this Journal is devoted largely to the Szondi test is – hopefully – a sign of increasing interest in this method among American psychologists. Of all the projective methods of personality investigation probably this is the one which has aroused greatest resistance in this country. This is understandable in view of the numerous assumptions underlying this method, – assumptions which differ markedly from those underlying other methods usually referred to as "projective techniques". While the latter are based on the principle that the basic tendency of human personality is to express itself, – in case environmental limitations are reduced to a minimum –, Szondi's method implies much more definite assumptions in regard to human motivation in general. His basic theory of "genotropism" – of which this test is only a by-product, so to say – implies a general principle of "resonance" in human motivation; a principle according to which our significant choices are based on some sort of similarity which binds the chooser and the chosen one into one unit. The implications of this theory in regard to human psychology and psychiatry are far wider than the problem of the Szondi test as a diagnostic instrument. Szondi's strictly genetic postulations have frightened away many psychologists from serious consideration of this far-reaching basic principle – even though one can go a long way in considering this theory without the logical necessity for accepting or rejecting statements in regard to the role of the genes in human psychology.

The reason for my emphasizing the importance of theory in this brief introduction lies in the necessary connection between theoretical outlook and empirical research. The type of problems we choose to investigate and the type of analysis we perform on the data are determined explicitly or implicitly by our theoretical orientation. It is my feeling that in many instances the Szondi test has been used without due consideration of its theoretical assumptions. Involved statistical manipulation of data without knowing the types of questions one can ask from a method is meaningless. Thorough theoretical knowledge is a prerequisite to knowing what type of data we should gather and what we should look for in those data. Mr. Schubert's article, published in this issue, illustrates the point. Through proper understanding of the nature of the Szondi method he is able to deduce the logical necessity for the uneven stimulus values of pictures within the same factor, a phenomenon which some other psychologists, less familiar with the underlying theory, interpreted as invalidating the test completely or at least a most undesirable feature which needs correction. However, as Mr. Shubert points out, equalizing the stimulus values would prevent the functioning of the test altogether.

We can only hope that the future will produce more of such theoretically well-founded studies and fewer superficial manipulations of data. Thorough acquaintance with

Szondi's original works, the latest of which, the "Triebpathologie", (1) is under translation now, and of the Swiss publication, "Szondiana", (2), would greatly aid those interested in this test to find empirical approaches which fit the essence of the method.

References

1. Szondi, Lipot; Triebpathologie. Hans Huber: Bern, 1952.
2. Szondiana; published by Hans Huber: Bern and Stuttgart.

An Extension of the Mosaic Test Designed To Increase Its Prognostic Value [1]

BARBARA BOWEN
Friends Hospital, Philadelphia, Pa.

One of the most vital questions that faces a clinical psychologist who is evaluating the results of a test battery is that of prognosis. Treatment is, in general, aimed toward having the individual modify his usual modes of behavior and develop modes which are more effective for living in society. A person can do this by accepting outside support which will help him to understand the causes for the old behavior patterns and to integrate his strengths so that new patterns may be tried. It is also possible to force the individual to give up the old behavior without helping him to reach an understanding or to develop new modes of responding. Which way a treatment situation will be used is determined both by the treatment and by the individual being treated. Some people will feel that any sort of therapy is an imposition of external standards which denies their needs and individuality. Others will be able to use any type of treatment as an aid to better management of themselves. We need to be able to judge how a patient will use the opportunity to change which treatment implies.

Testing the limits in the Rorschach helps to answer this question to some extent. However, since a second Rorschach cannot be administered immediately after the first, this procedure does not allow us to see how well the individual spontaneously incorporates suggested changes into his usual behavior when he is no longer under the direct influence of the examiner's suggestions.

Lowenfeld's Mosaic Test, with its complete changeability and shorter units, makes it possible, and acceptable to the subject, to ask for more than one design. The procedure with which this report is concerned consists of having the individual make one or two Mosaics and then asking him to make specific types of designs. At present, four different design types are used, but they can be, and are, varied to meet the needs of the individual case. After these so-called forced designs have been made, the individual is asked to make a final free design, in order to observe the way in which the forcing has affected his usual production.

The forced design types were chosen to include a range from rigid organization to relative disorganization. They are: radially symmetrical, bilaterally symmetrical, asymmetrical cohesive, and asymmetrical uncohesive. (Plate 1, a, b, c, & d respectively). The structure of each type is described with the aid of the sample designs until the subject indicates that he understands the requirements. The samples are made of shapes and colors or shades other than those contained in the set, and special emphasis is placed on not copying the sample. In evaluating the performance, it is important to note the degree of success in meeting the structural requirements, similarities and differences between the individual's free and forced designs in the use of color and

[1] This paper was delivered at the meetings of The Society for Projective Techniques in Washington, D. C., Sept. 1952.

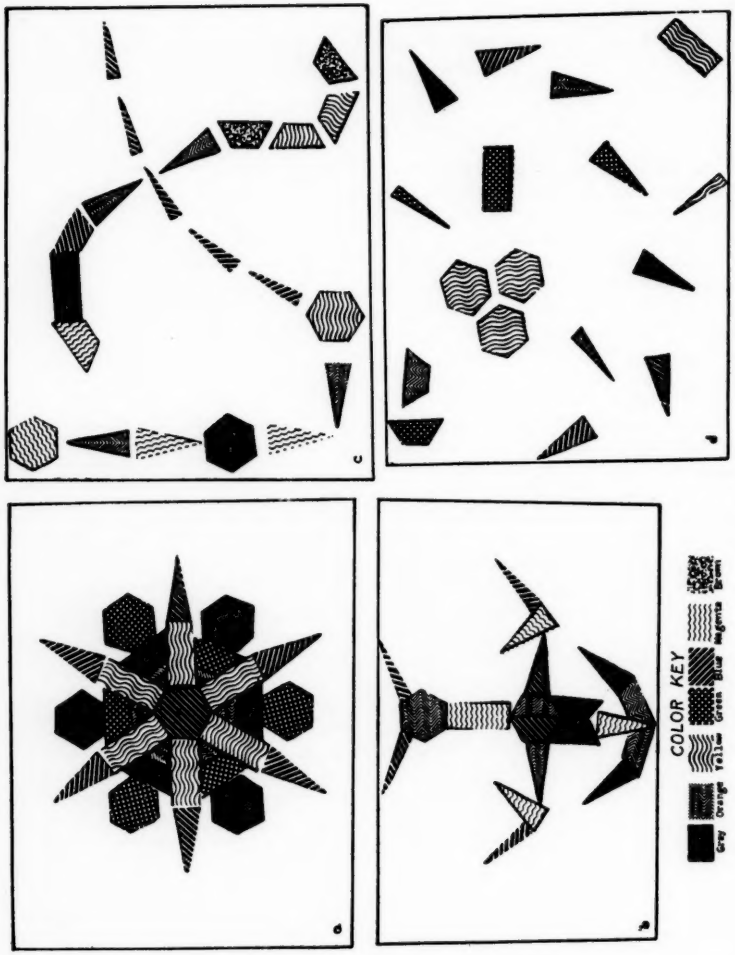

PLATE I.

of form, the relation of the design to the tray, and the manner of building the design. The final design is examined to see if it incorporates ways of using the material which first appeared in the forced designs, and, if it does, whether to the benefit or detriment of the design.

During the past year and a half, about 45 such series have been administered, mostly to patients in Friends Hospital, Philadelphia. The qualitative features of the following series illustrates the way this material can be used for prognosis. Kate was a 20 year old girl, who became ill during her psy-

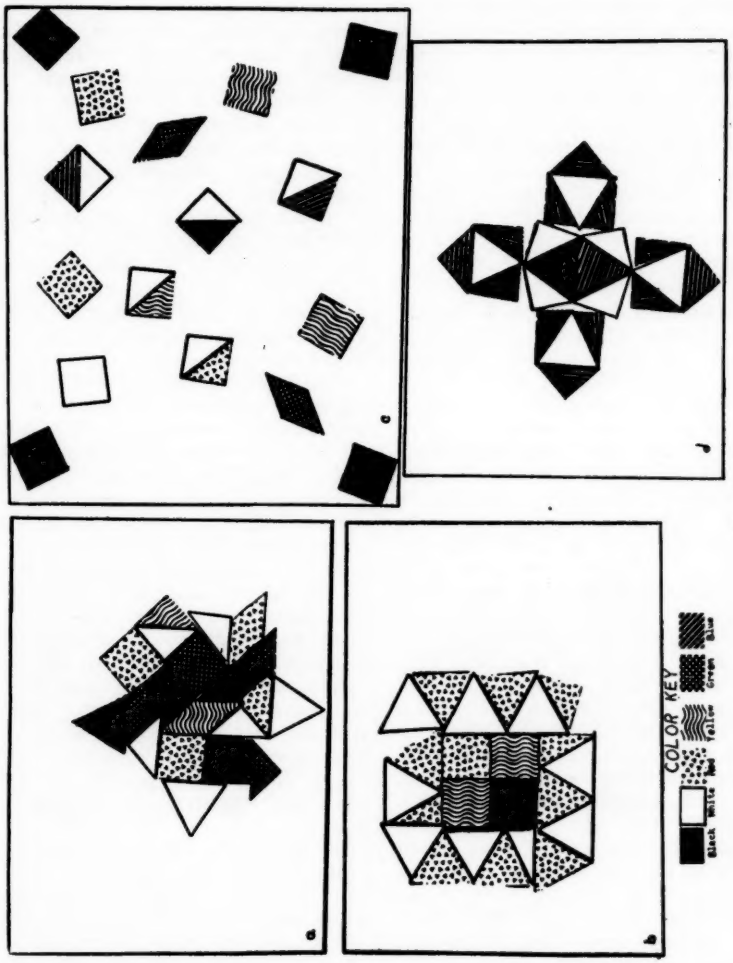

PLATE 2.

chiatric affiliation as a student nurse. Shortly after her admission, she was seen for psychological evaluation. She was seen again before discharge, following treatment with insulin coma. The series was given during the first testing. Only one Mosaic was obtained in the test battery after treatment.

Her first free design (Plate 2, a) is a collection of pieces in which she apparently makes no purposeful use of form or color. However, careful observation of the way in which she selected the pieces makes it possible to say definitely that her use of color was deliberate. It is important to note that she was

free to respond with a variety of emotions, represented by the variety of colors used, when she was completely free in this new situation. Equally significant is the fact that their use and the structure which contained them were highly individual, with meaning only for her. This type of design, generally called an agglutination, seems to be made only by schizophrenic patients.

When Kate was asked to do a second Mosaic, (Plate 2, b), she made this somewhat more organized, but almost equally unsuccessful, design. Already, with the addition of meaningful organization, there is restricted use of color. The use of red and white exclusively seems to be one clear way of portraying a schizophrenic conflict in the Mosaic materials. Although Kate does not go quite that far, this is basically a red and white design, suggesting both her intense hostility and the ineffectiveness of her methods of dealing with it.

Given a choice of the four forced patterns, Kate chose to do the asymmetrical cohesive design first (Plate 2, c). This type of design is the one which most closely resembles her spontaneous production. She cannot, however, actually fulfill the demands, and ends with even less structure than was asked of her. The fact that when she can use a highly personal form of organization, she can use colors freely, becomes immediately apparent. The black corner pieces suggest a depressive element, which seems to serve as a buffer between her and her environment.

Her second forced design is also unsuccessful (Plate 2, d). It is meant to be radially symmetrical, but is, strictly speaking, only bilaterally symmetrical. Even more important is the sharp curtailment of color use in this rigid design. All warmth is gone, and the cold, intellectual colors take over, emphasizing the depressive trend first noted in the preceding design.

Although Kate is not quite as restricted in her use of color in the comparative freedom of the scattered design (Plate 3, a), she is no longer able to be free. This design is more sparse than her previous one, suggesting the beginning of an intellectual as well as an emotional limitation, with the continuing pressure of the forcing situation. The depression continues to become more evident.

Kate is better able to handle the situation when she is asked for a bilaterally symmetrical design (Plate 3, b). There is still a marked color restriction, with pronounced depression. If one wants to be exact, the design is not absolutely symmetrical. The trouble, as in the radially symmetrical design, occurs in the center, suggesting, in spite of a surface conformity, a continuing central problem. An interesting consideration in relation to the bilateral designs is their similarity to human representations. Frequently they are called human or are referred to by personal pronouns. This one seems like a very top-heavy person with almost no body.

What are the effects of the forcing process on Kate's final free design (Plate 3, c)? She is much more conventional in her structural organization, and with the maintenance of organization, she still has difficulty using the colors. She seems to interpret this forcing situation as an invitation to conformity, and she attempts to accept it in spite of what it costs her in spontaneity and warmth. From this, it would be expected that any treatment, particularly one which emphasizes the group rather than the individual, would only cut

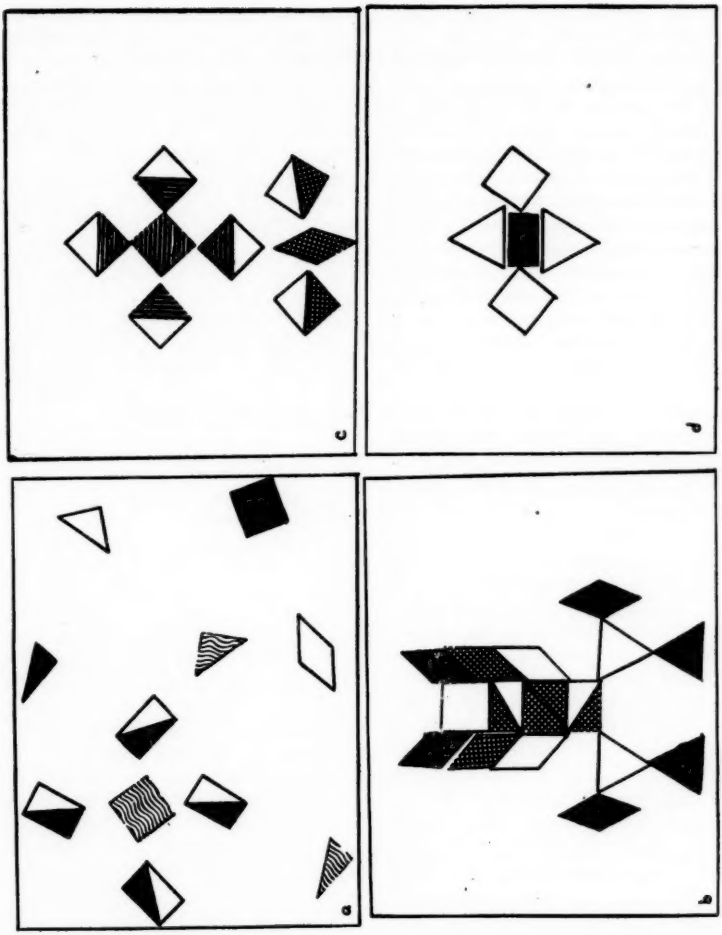

PLATE 3.

down further on her ability to be an individual, to be spontaneous and free in her emotional responses and in her thought patterns.

In one sense, insulin coma is probably the ultimate in forcing techniques. After Kate had been subjected to it, she made a design (Plate 3, d), which certainly confirms what was expected from the pre-treatment series. It is much simpler in organization, much more depressed and lifeless, and, probably, much less available to less drastic forms of therapy.

Other series have shown a variety of other response patterns. For example, some people are completely unable to change their own typical behavior in order to produce the series patterns. Others grudgingly make the forced de-

signs to specifications, but when returned to the free situation, immediately revert to their individual type of design. Neither of these kinds of people can be expected to get far in therapy since the ability to change is absent or very limited. A third kind of person abandons his usual behavior patterns in an attempt to comply, but is then unable to utilize the new structural elements suggested by the samples or to return to his own organization. The result in such a case is complete confusion, and the implication is that therapy involves potential dangers, so that an especially careful evaluation of the possible gains and losses should be made before undertaking it. Fortunately, there are also those people who are able to use the forcing situation as a support so that they can try new elements of experience and behavior, gaining new freedom and strength. These are the really hopeful ones prognostically.

Since the variety of possible responses to the forced Mosaic series seems closely related to the variety of possible responses to therapy, and since these responses seem to be based on the same qualities of the individual's ability to change, it is suggested that this technique is useful in answering questions which are central to treatment planning and prognosis.

Received July 6, 1953

The Assumption of Additivity on the Szondi Test [1,2]

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PROBLEM

Implicit to all adding procedures in mensuration is the assumption that the elements which are added together share something in common. Thus, four rhesus monkeys and two albino rats are capable of meaningful addition to six mammals. In psychological measurement, the principle of sharing in common takes the form of a requirement that the elements to be added are correlated in the population to which the test is to be applied. Thus, the justification for adding correct responses to "Who discovered the North Pole?" and "Who wrote Faust?" resides in the fact that among those people passing the first item there is a greater proportion passing the second than among those failing the first, or, simply, that the items are correlated.

This requirement is further clarified by factor analysis. Generally, the variance of an item is associated in part with the specific factor it measures, in part with errors of measurement (unreliability), but also in part with the factor common to all the items in the test. When the item scores are added for any given individual, the contribution of item specifics and errors, by definition, tend to cancel out, and the resulting score tends to be a measure of the quality or qualities shared by the items. If a group of items share no communality, that is, if each item measures only something specific to itself, then the total scores for a set of individuals can not be considered measures of some functional unity (although, to be sure, they might be related to some criterion containing the independent factors measured by the items).

The requirement of item-intercorrelation is generally well met in tests of abilities, aptitudes, and school achievement, and fairly well met in objective tests of personality and attitudes, particularly those which have been constructed with an awareness of psychometric theory. In the domain of projective techniques, item-intercorrelations, and therefore the issue of additivity of elements which are combined into a total score, have only rarely been investigated. Wittenborn (6), for example, found that the requirement for additivity is only partially met in the Group Rorschachs of college students.

For the Szondi Test, scoring proceeds by adding the number of photographs of representatives of a diagnostic category which the subject chooses as "liked", and again those chosen as "disliked". This is done separately for each of the eight diagnostic categories (factors) represented on the test. Viewed psychometrically, the Szondi is a battery of eight subtests, each containing six items which are added for a total "like" and a total "dis-

[1] From the Neuropsychiatric Service of the Veterans Administration Hospital, Bronx, New York. The authors wish to acknowledge gratefully the cooperation of Dr. H. L. Flowers, Chief, Neuropsychiatric Service, and Dr. R. S. Morrow, Chief Clinical Psychologist.

[2] This study was presented at the 1953 American Psychological Association Convention at Cleveland, Ohio.

like" score. The six photographs representing a factor are treated as equivalent; the selection of any homosexual picture as "liked" receives the same treatment as the selection of any other.

The purpose of the present study was to determine whether the requirements of additivity are met by the Szondi because of the bearing this issue has on the question of test validity. Translated into research terms, this means the investigation of the extent to which item choices within a factor are positively correlated. Predominantly significant positive correlations among the choices of the six photographs of a factor would indicate a communality of item measurement and hence would justify the adding procedure; predominantly non-significant correlations would fail to justify this addition, and call into question the scoring procedures of the technique.

Subjects

The Szondi records of 200 subjects were employed. All were male veteran neuropsychiatric patients, the ages ranging from 20 to 65. About half the data were collected in the Neuropsychiatric Veterans Hospital at Lexington, Kentucky, and the other half came from the psychiatric wards of the Bronx V.A. Hospital (a general medical and surgical hospital). With regard to diagnosis, about half were neurotics and character disorders, one-third were schizophrenics, 10% were cases involving cerebral pathology, and the balance were miscellaneous. The cases at each hospital were serial referrals. The two sources of patients were combined in order to maximize the personality heterogeneity so as to permit the emergence of positive correlations wherever present. Both the relatively large number of subjects

Table I—An Example of a Contingency Table: Association of Responses for *h* Photographs in Series 3 and 4 for 200 Male Neuropsychiatric Patients

		h_4 Dislike	h_4 Non-Choice	h_4 Like	Row Total
h_3	Like	6 (12.2)*	38 (46.1)	43 (28.7)	87
	Non-Choice	11 (11.9)	52 (45.0)	22 (28.0)	85
	Dislike	11 (3.9)	16 (14.8)	1 (9.2)	28
	Column Total	28	106	66	200

$X^2 = 34.49,\ p < .001\ ;\ t = \dfrac{(o-e)\sqrt{N-1}}{\sqrt{e\,(N-e)}} = \dfrac{(106-77.6)\sqrt{199}}{\sqrt{77.6\,(200-77.6)}} = 4.11,\ p < .001$

*Parenthetical values are those expected (e) on the hypothesis of no association.

Table II—Szondi Photograph Pairs Significantly Associated (5% Level) by Chi-Square Test for 200 Male Neuropsychiatric Patients.

Szondi Factor							
h	*s*	*e*	*hy*	*k*	*p*	*d*	*m*
2-3*	1-3*	2-6	4-5*	2-5*	3-4*	1-5	1-2*
2-4*	3-6*	3-4				2-3*	1-5*
2-5*	4-5*					3-6	1-6
3-4*	5-6						2-5*
3-5							2-6*
4-5							3-5
							3-6*

* *t* also significant at 5% level.

and their heterogeneity were deemed necessary conditions for a fair test of the hypothesis.

PROCEDURE

Each subject provided a single Szondi record. Where more than one record was taken, the first was used. The standard procedure for administration described by Deri (2, p. 8-12) was used, except for the omission of final choice of four most "liked" and four most "disliked" photographs. Thus, the basic data were the two "likes" and two "dislikes" from each of the six series.

For each Szondi factor separately, the following procedure was employed: The six photographs give rise to 15 different pairs when each is correlated with every other. Each photograph is responded to as either a "like", a "dislike", or a non-choice. For each pair of photographs, these three possibilities are cross-tabulated, and a 3x3 contingency table results (see Table I). The 200 cases were then tallied in this table and chi-square (four degrees of freedom) computed and evaluated in terms of p value. These 15 intercorrelations were determined for each of the eight factors; thus, the complete analysis involved the determination of 120 contingency chi-squares, each with an N of 200.

Since chi-square takes into account neither the sign nor the linearity of the relationship, a method was needed whereby it could be determined whether, for any pair in question, "like" was associated with "like", "dislike" with "dislike", and non-choice with non-choice, i.e., whether the relationship was significantly positive. Using the technique given by Lubin and Malloy (4), a comparison was made between the number of obtained frequencies of subjects giving the same response to the two photographs, and the number expected under the hypothesis of no relationship, by means of Fisher's t (see footnote, Table I). This test was performed only in those instances where the chi-square value for the entire table was significant at the 5% level. A table with a significant chi-square which does not have a significant t signifies merely that the responses to the two photographs are somehow related. When the t is also significant, it indicates that the photographs are responded to similarly, i.e., that the relationship is positive and adding is justified.

RESULTS

Of the 120 contingency table chi-squares, 25 were significant at the .05 level. Of these, 16 were significantly positive (i.e., led to significant t's), predominantly at the .001 level. Only three of the 25 were negatively associated, none of which, however, was significant. Table II presents, by factor, the photograph pairs which led to significant (.05) chi-squares.

It is worthy of note that the various factors do not contribute equally to the number of significant associations. The factors m, h, and s together accounted for 12 of the 16 significant positive relationships, m and h together contributed nine.

DISCUSSION

From these results, one must conclude that as presently constituted the choices of photographs within a factor are not all capable of rational addition. However, here and there throughout the test, photographs of the same factor are significantly associated. Thus, some reliability is present in the test.

The implications of this conclusion will be dealt with following the discussion of a difficulty which has not yet been considered.

A problem which is encountered in attempting to make the research method pertinent to the rationale of the Szondi Test resides in the concept of ambivalence. An ambivalent factor-valence consists of a piling up of both "like" and "dislike" choices in a factor, and must therefore be predicated upon pairs of photographs one of which is "liked" and the other "disliked". In the statistical tests, subjects who are ambivalent on a factor therefore tend to reduce the positiveness of the associations. In a sense, this is not fair to the Szondi rationale. However, it may also be claimed that the Szondi rationale is not fair to scientific method: an opponent of the test would suggest that what another test constructor considers to be error measurement or a failure in scaling, i.e., a fault of the test, is elevated by Szondi to a personality characteristic, in a manner of speaking a "fault" of the subject. Szondi's position implies that there is no error measurement in his test. He might possibly attenuate his position to admit of both possibilities, namely both "true ambivalence" and error measurement operating in a group of contradictory photograph choices. But in that case there is no hypothesis to test unless one can specify the relative incidence of error and "true ambivalence" in such choices. The two possibilities might cancel out for any pair of photographs and leave obtained frequencies for contradictory choices equal to the value expected on the null hypothesis and hence no contribution to chi-square. Although this position is logically self-consistent and may account for the facts, it is certainly not parsimonious. Further, the impasse which results is incapable of resolution by means of experiment. The present experimental design fails, by necessity, to take this issue of ambivalence into account. The ultimate test of the meaningfulness of this concept must come from external validation.

A research similar to this was reported by Lubin and Malloy (4). Using a group of 100 English psychiatric patients, made up equally of men and women, they subjected Szondi records to the same statistical analysis as was used here. They found 17 significant chi-squares (compared to the present 25), of which nine were significantly positive (compared to the present 16). The fact that the present study led to a greater number of significant relationships is probably primarily attributable to the fact that it involves twice as many subjects and therefore runs a lesser risk of Type II errors, i.e., the error of falsely concluding that there is no relationship. The two studies show considerable agreement in the pairs of photographs found significantly associated. Of the nine pairs which were significantly positively related found by Lubin and Malloy, five were found in the present study. This agreement is noteworthy when one considers the differences in sex distribution and cultural background between the samples.

Lubin and Malloy (4, p. 484) conclude that their results "appear to invalidate the basic assumption underlying the Szondi and *a fortiori* to cast serious doubt upon the validity of the test". This conclusion is reasonable on the basis of the evidence of the two studies. However, certain considerations prevent its full acceptance:

1. One of the present authors (L.F.) has used the Szondi follow-

ing Deri's rationale (2) in everyday psychodiagnostic practice with results which were quite satisfactory and seemed to be validated by findings from other tests, case history and subsequent developments. However, the authors are aware of the clinician's capacity for unwitting self-deception, and were this the only consideration, it would be waived.

2. It is true that most of the experimental research with the Szondi has resulted in failures to reject null hypotheses. (These may be attributed to Type II errors, in part, since the groups reported on were typically small.) However, at least two well-controlled procedures have resulted in findings indicative of some validity. Feigenbaum (3) has demonstrated that a large majority of competent clinicians can correctly predict to a far greater than chance degree the direction of relationships between Szondi and other test and case history variables. A second finding hard to explain away was that of David (1), namely that Lipot Szondi could highly significantly discriminate between the test protocols of epileptics and homosexuals (although neither single factors nor test formulae provided in his text (5) could do so). Findings of this kind suggest that somewhere in this test there is hidden some validity.

3. It may be argued that the photographs of a factor need not intercorrelate, that they represent different aspects of the factor score the latter then being analagous to a multiple regression composite score based on uncorrelated measures. Although not posited by Szondi or workers with the test, and exceedingly unlikely on its face, this is nevertheless a logical possibility.

4. The problem of the treatment of ambivalence discussed above provides a similar difficulty. If, as is conceivable, an appreciable proportion of contradictory picture-choices are the consequence of "true ambivalence", the present findings are not pertinent to the validity of the Szondi. As was true in the previous paragraph, although the argument is not very convincing because of its lack of parsimony, it is nevertheless logical, and both arguments can only be evaluated by means of external validation.

5. Both the present study and that of Lubin and Malloy (4) indicate that *some* photograph-pairs in each factor are significantly related.

In the light of the foregoing considerations, it is not possible to conclude with certainty that the Szondi Test is necessarily invalid, despite the fact that the factors as now constituted do not satisfy the requirements for additivity. Points 3 and 4 above argue for the irrelevance of the present design to the question of validity. In the light of the presence of some inter-item correlation, it is possible that a useful test might result by purging from each factor those photographs with the lowest inter-item correlations. This abbreviated test could be evaluated in such a way as to avoid the objections of points 3 and 4 above by correlating factor scores against external criteria which had been predicted in advance on the basis of theory. Research along these lines is now in progress.

SUMMARY AND CONCLUSIONS

The present investigation sought to evaluate the additivity of Szondi factor scores by means of determining the number of significant positive associations among re-

sponses to photographs representing the same factor. When the 120 such pairs were studied for 200 male neuro-psychiatric veteran patients, only 25 were found to be significantly related and of these, only 16 were significantly positive. Most of the latter came from the manic, homosexual and sadist factors. The conclusions which were drawn were as follows:

1. As presently constituted, the Szondi factors contain many items sharing little variance in common with others in the same factor. Thus, the additivity of these factors is seriously in question.

2. Methodological and logical problems arise which prevent a final decision as to the test's validity on the basis of the present research design. Such a decision can ultimately be made only on the basis of correlation of the test with external behavior.

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A Szondi Test Bibliography, 1939-1953

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The Szondi test has attracted the interest and caught the imagination of many psychologists in Europe and America, or so it appears, judging from the 330 odd references. It seems appropriate at this time, nearly 15 years after Szondi published his first test findings, to attempt to gather in one convenient place the widely scattered Szondi test literature. And so, accessible books and journals were searched, secondary sources were consulted for pertinent material not available in its original form, and a number of early Hungarian references were kindly supplied by Dr. Szondi. The result has been arranged and classified in a style adopted from the *TAT Newsletter* Bibliography, published in this *Journal*. No doubt, there are omissions, misclassifications, and other errors, which, if brought to the attention of the editor, may be corrected in a future supplement. Foreign language titles have, in so far as possible, been reproduced in their original linguistic form with free style English translations added in parenthesis. Where available, cross references to the *Psychological Abstracts* have been provided.

It may be of some historical interest that Szondi first presented his theory of fate analysis (Schicksalsanalyse), in a 1937 issue of a Dutch journal published in English (309). He announced his test in a 1939 Hungarian publication (149), reporting the test profiles of twins. The first discussion of the Szondi test in a professional American journal was published by Rapaport (29) in 1941. For the sake of completeness, Szondi's earlier papers and related references have been included in the last section of the bibliography.

The techniques of Szondi test administration and interpretation, originally described in Szondi's 1947 *Experimentelle Triebdiagnostik* (41), and translated by Aull (42) in 1952, have undergone considerable expansion and revision. Szondi's latest text, the *Triebpathologie* (43), published in 1952 as the first of a series of volumes, incorporates the revised methods, but has not yet been translated. A number of instructive papers reporting the clinical application of the Szondi test in a variety of situations has been collected in the *Szondiana* (20), a supplement to the *Schweizerische Zeitschrift für Psychologie und ihre Anwendungen*, issued at irregular intervals. Another series of individual contributions to Szondi test and theory has begun publication in Switzerland under Szondi's personal editorship (45). The Swiss Psychological Society has established a Szondi Commission, for the purpose of collecting and exchanging information. It has been requested that pertinent papers and reprints be sent to the Commission's Archives, Dunantstrasse 3, Zurich, Switzerland.

It may be of further interest to consider the bibliographic entries according to the year of original publication, excluding the book reviews and Related References. The 1953 data are completed through December for available data.

Year:	'39	'40	'41	'42	'43	'44	'45	'46
Number of Items:	1	1	4	3	6	3	1	8
	'47	'48	'49	'50	'51	'52	'53	Total
	12	15	41	54	48	35	38	270

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Differential Diagnosis Of Delinquents With The Szondi Test[1]

SUSAN K. DERI

Before we talk about the problems of differential diagnosis by means of the Szondi, we should ask whether this test offers any known "signs" for criminality or delinquency. The fact is that there are no such definite signs, so it looks as if this would not solve our problem of differential diagnosis. If there are no signs specific to delinquency, we cannot expect differential signs either. Yet the Szondi test *is* a helpful instrument in revealing the psychodynamics underlying delinquent behavior.

The answer to this seeming contradiction lies in the meaning of the term, "signs". Much confusion in regard to the validation of projective methods could have been avoided if, on the one hand, research workers would have been more careful in publishing their results in terms of "signs" and, on the other hand, if validators of various techniques would not have misinterpreted and misused these "signs". As a matter of fact, sometimes they inferred the existence of established signs where such signs were never originally mentioned. For example, there was a dissertation on the Szondi test (1) in which "signs" for homosexuality were used as the main criteria, these signs having been inferred on the basis of lumping together all the entries under the word "homosexuality" in the index of my book (2). These signs were supposed to be found in a group of 100 homosexuals, half of whom were gathered from private psychoanalytic practice, the other half from a prison. Obviously, even if any signs of homosexuality had been mentioned, they could not hold for two groups as different as these.

And here we come to one of the basic problems of interpreting projective techniques - or rather of human psychodynamics in general - namely: what is the relationship between existing psychological tendencies and manifest behavior? Much lipservice has been paid to the principle that identical surface manifestations can be produced by different underlying causes and the reverse: similar psychological causal factors can result in different behavior symptoms. The relationship between the genotype and phenotype – as Lewin (5) has formulated this problem – is involved indeed. Yet, looking at the experimental design of many validation studies, one could easily be led to believe that there is a simple one to one relationship between overt behavior and dynamic factors within the personality as these are inferred from projective tests.

Now with all this in mind we can turn to our immediate problem: in what way does the Szondi test help us when dealing with the psychological evaluation or treatment of criminals and delinquents? Can we *diagnose* with certainty various types of criminality and delinquency on the basis of the Szondi profiles? No, we cannot. We cannot do that in spite of the fact that there are certain types of choices of the Szondi pictures which are characteristic of certain types of individuals who in one way or another

[1] Paper read before the Annual Meeting of the New York Chapter of the Society for Projective Techniques, March 14th, 1953.

get into trouble with the law. Yet, talking about "signs" - in the precise meaning of the word - would mean that criminality is *visibly represented* by certain configurations in the profiles. The fact, however, is that none of the Szondi responses has immediate, direct reference to criminality, not even the "s" factor which is composed of pictures of criminal sadists. What the Szondi profiles do have more direct reference to (I hesitate to say "direct" because of the involved theory underlying the interpretation of any of the Szondi factors) are such aspects of personality as intensity of drives, the ability to channelize or sublimate primitive drives, the presence or absence of various types of integrative mechanisms and the presence or absence of certain self-regulating processes. In view of these aspects of personality organization one can say that what antisocial individuals have in common in their Szondi profiles is the presence of intensive primitive drives with simultaneous lack of integrative or sublimating mechanisms, unsatisfactory correlation between the constellations of the eight drive-factors, which means the lack of healthy self-regulating processes. To express this statement in more subjective terms, criminals seem to be strongly driven individuals who are unable to synthesize their opposing drives and are therefore unable to satisfy either of these drives without experiencing frustration at the same time. This inevitable residue of unreleased and uncontrolled tension seems to be the driving force behind the antisocial action. Depending on the quality of the particular need which is in the state of most imbalanced tension, there are differences in the particular type of antisocial action.

Of course, imbalanced and poorly integrated drives are to be found in the profiles of neurotics and psychotics as well. In a rough way we can differentiate the reactions of these groups from those of criminals in the following way: 1) The imbalance in the case of neurotics is often imbalance in the sense of overcontrol or a compulsive attempt to sublimate more than can be done without paying for it in what we call mental health. 2) In psychotics the type of imbalance is more variable and is least likely to be found in the area of emotional control, that is in the Paroxysmal Vector, while in criminals poor balance in the Paroxysmal Vector is frequent.

Now to make these rather theoretical-sounding statements more tangible let us turn to the actual data. The groups of 13 murderers, 50 thieves and 25 cases of truancy from the Juvenile Court (Tables Ia, b, c; IIIa, b; and IV a, b) were profiles I brought from Hungary. They were taken in prison and at the Juvenile Court and only one profile on each subject is used, since several subjects had only one. Since we are interested in group trends only, this procedure is permissible. The data on the Parisian prostitutes (Tables IIa, b, c) were collected by Edwin Fancher.

The above groups are small and of varying size and, except for the particular forms of antisocial behavior, I know very little and sometimes nothing about the individual members in the groups. If in spite of these experimental deficiencies we find some characteristic and psychologically meaningful trends and differences of trends between the various groups, then we can assume that these forms of antisocial behavior stem from fairly well definable and basic psychodynamic tensions, or rather patterns of tensions within the personality. But

TABLE I—Differential Diagnosis of Delinquents with the Szondi

TABLE Ia—Murderers. N = 13
Individual Profiles Expressed in Factorial Directions

	S		P		Sch		C	
	h	s	e	hy	k	p	d	m
1.	+!	0	—	0	+	—	+	—
2.	+!	+	—	0	0	—	0	—
3.	+	+	—	0 !	—	—	+	—
4.	+	+	—	0	—	—	+	—
5.	+	0	—	0	—	±	+	—
6.	+	0	—	+	—	±	0	—
7.	+	0	—	+	—	—	+	—
8.	+	0	—	0	±	+	+	—
9.	+	0	0	0	0	±	+	—!!
10.	+	0	—	—	0	0	+	—
11.	0	+	—	0	—	—	+	—
12.	+	+!	±	—	—	—	0	—
13.	+	+!	—	—	—	±	0	±
Σ0	1	7	1	8	3	1	4	0
Σ±	0	0	1	0	1	3	0	1
Σ0+	± 1	7	2	8	4	4	0	1

Degree of Latency: S = 6 (h+) P = 6 (e—) Sch = 0 C = 3 (m—)

$$\frac{\Sigma 0}{\Sigma +} = \frac{25}{6} = 4.1$$

Symptomatic	hy	S
Root factors	h+	m—

Murderers

TABLE Ib—Factorial Reactions in %
N = 13

	h	s	e	hy	k	p	d	m
0	7.6	53.8	7.6	61.5	23	7.6	30	0
+	92.3	46.2	0	15	7.6	15	70	0
—	0	0	85	23	61.5	53.8	0	92.3
±	0	0	7.6	0	7.6	23	0	7.6

TABLE Ic—Illustrations of Most Frequent Reactions of Murderers N = 13

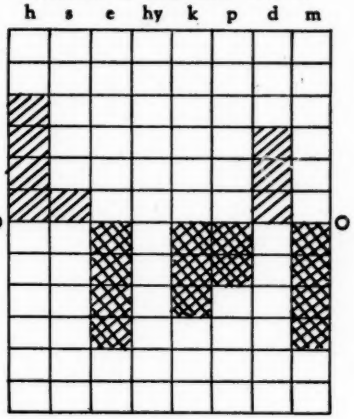
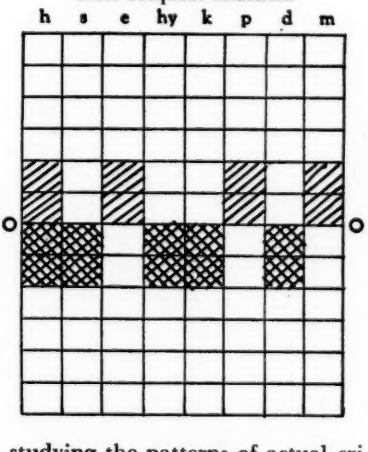


TABLE Id—Theology Students: N=40
Harrower's Data (5)
Most Frequent Reactions



even if we find such characteristic patterns, we cannot interpret them as "signs" from which the commission of various types of crimes and delinquencies can be predicted. All they will show is a certain *readiness* in the personality to react in an antisocial way under certain given circumstances. However, studying the patterns of actual criminals will help us to evaluate the potential danger in individuals who give similar patterns but who have not been in trouble with the law.

One more reason why it seems worthwhile to present the data of these numerically small groups is

TABLE II—Szondi Tests on 19 Parisian Prostitutes

TABLE IIa—Individual Profiles Expressed in Factorial Directions N = 19

	S		P		Sch		C	
	h	s	e	hy	k	p	d	m
1.	+!	0	—	0	—	—	—	±
2.	+	+!	—	—	±	0	—	0
3.	+!	0	+	—	±	—	0!	—
4.	+	±	—	±	—	—	0	0
5.	±	+	0	±	—!	0	0	0
6.	0	0	+	—	—!	0	±	+
7.	+!	+	+	—	—	0	0	+
8.	+!	+!	—	—	—	0	0	—
9.	±	+!	+	0	—	—	—!	0
10.	+!	±	+	—	—	—	0	—
11.	+!	+!	0	—	—	—	0	0
12.	+!	+	0	±	—	—	0	—
13.	+!	+	±	0	0	—	+	—
14.	+!	—	—	—	—	+	—	+
15.	+	0	±	—	±	—	±	+
16.	+!	+	0	—	—	+	0	—
17.	+!	+	—	—	0!	—	+	—
18.	+	+	0	—	—	±	0!	+
19.	+	+	0	0	—	±	+	—
Σ0	1	4	6	4	2	5	10	5
Σ±	2	2	2	3	3	2	2	1
Σ0+±	3	6	8	7	5	7	12	6

Degree of Latency	S = 3	P = 1	Sch = 2	C = 6
	h+	hy —	k —	m

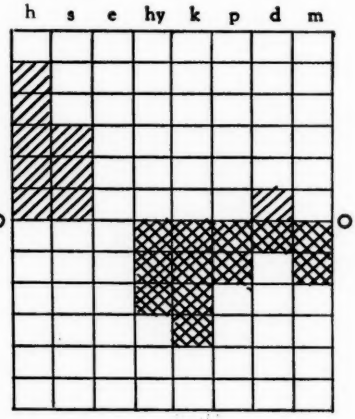
$$\frac{\Sigma\, 0}{\Sigma \pm} = \frac{37}{17} = 2.1$$

Symptomatic	d12	e 8	hy 7	p 7	
Root factors		h+			

TABLE IIb—Factorial Reactions in %

	h	s	e	hy	k	p	d	m
0	5.4	22.	31.6	22	10.8	26	52	26
+	84.2	63.2	26	0	0	10.8	16	26
—	0	5.4	31.5	63.2	73.5	52	22	42
±	10.8	10.8	10.8	16	16	10.8	10.8	5.4

TABLE IIc—Illustration of Most Frequent Reactions of Prostitutes N = 19



that the results coincide very closely with those of Szondi, so that one could actually consider these data as validating Szondi's theory about the meaning of the drive-factors.

Table Ia shows the individual test profiles of 13 murderers expressed in factorial directions. These are murderers who in the German psychiatric literature are called "affect-murderers". In other words, they killed when they were in a state of anger. None of them was diagnosed psychotic or psychopathic. Most of them were Hungarian peasants who got into an argument and in the heat of the quarrel lost their temper, pulled out a knife and killed their opponent.

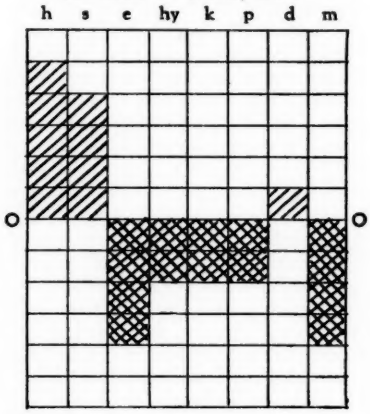
Since I was interested in group trends, I treated the 13 profiles as I would treat a series of 13 profiles of the same individual. A glance at the tabulated profiles shows the group trends very clearly. The plus "h", minus "m" pattern is to be found in practically all of them. This gives us a socially very negative framework for the interpretation of all the rest of the profiles. The plus "h" means in-

TABLE III—Truancy Cases From the Juvenile Court N=25
Age 7-11

TABLE IIIa—Factorial Reactions in %

	h	s	e	hy	k	p	d	m
0	4	17	0	24	12	44	48	12
+	96	76	0	20	12	4	44	0
−	0	0	76	56	48	52	4	88
±	0	7	24	0	28	0	4	0

TABLE IIIb—Illustration of Most Frequent Reactions of Truancy Cases



tensive, infantile need for sensual contact, while the minus "m" indicates pessimistic reaction to oral frustration, or in social terms: no hope in deriving pleasure from human contact.[2]

The tabulation of the frequency of symptomatic reactions shows that the most imbalanced vectors are the Sexual and the Paroxysmal. (See degrees of latency S = 6 and P = 6)[3]

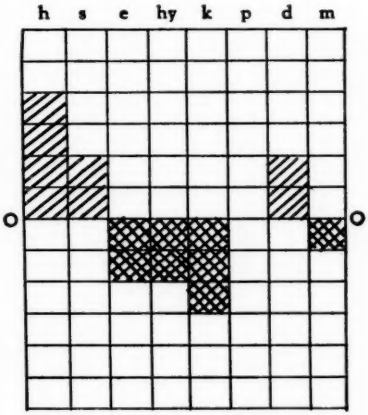
This means that a loaded plus "h" is most frequently accompanied by an open "s"; and in the Paroxysmal Vector a minus "e" by an open "hy". Since the twin-factors of a vector represented psychologically opposing drives, this constellation indicates the lack of self-regulating mechanisms in these areas. In other words the need for sensual tenderness of the plus "h" and the need for physical aggression of the "s", instead of mitigating and complementing each other by proper amalgamation, are both acting uncontrolledly. The same holds for the Paroxysmal Vector

TABLE IV—Thieves N=50

TABLE IVa—Factorial Reactions In %

	h	s	e	hy	k	p	d	m
0	6	16	20	30	16	28	28	36
+	84	44	12	18	2	28	46	14
−	6	28	54	38	64	28	8	36
±	4	12	14	14	18	16	18	14

TABLE IVb—Illustration of Most Frequent Reactions of Thieves N = 50



[2] For more detailed interpretation of the meaning of the eight factors the reader is referred to Deri (2).

[3] Symptomatic reactions are the open and plus-minus reactions. Imbalance in a vector is defined in terms of the difference in the number of symptomatic reactions of the two related factors which together form a vector. The greater the difference, the greater the imbalance within the vector, which means that the two closely related instinctual drives have very different discharge possibilities within the personality.

where the accumulated aggressive emotions indicated by the minus "e" are particularly dangerous because of the open "hy" which, instead of controlling, sets the stage for exhibiting the accumulated anger.

The relationship between the symptomatic and root-factors shows that in this group "s" and "hy" are the most symptomatic, that is, most easily discharged, while plus "h" and minus "m" are the root-factors—the unconscious, unreleased driving forces behind actions. These are individuals driven by their frustrated, immature drive for sensual and oral clinging and finding release by exhibiting uncontrolled aggression. It would be tempting to theorize about what are here the basic causal factors and which ones can be regarded as reactions to these. Are these people unable to channelize their basic frustration because of an intrinsic lack of what we call "ability to sublimate"? Or are these infantile drives pathologically strong to start with, thereby precluding successful socialization? Or is the tendency for aggressive acting-out constitutionally strong; or were the actual environmental frustrations unusually strong? We cannot even attempt to answer these questions here, but they are certainly worth thinking about.

In looking at the percentages of factorial reactions (Table Ib), it is as interesting to note the outstanding *large* percentages as it is to consider the categories in which there are *no* responses at all. The pattern of the zero percentages practically coincides with the pattern which would indicate ability to sublimate.

The most frequent reactions are illustrated graphically in Table Ic. Most of these reactions were already mentioned. The minus "k" with minus "p" is the typically non-sublimated Ego-picture, indicating lack of introjection, lack of capacity for identification, lack of self-awareness, lack of ability to conceptualize needs[4].

The presence of the minus "p" shows that there is a continuous unconscious projection of needs through action without, however, an awareness of this process. Actions are experienced as determined purely by the objective characteristics of the environment. Children around the age of seven, when they are most interested in manipulating concrete objects, and many non-intellectual adults show this Ego-reaction. This constellation appears almost always with plus "d", the indication of strong anal need for material things and, at a deeper level of interpretation, the search for substitute objects after the person was forced to give up the original attachment to the mother.

Before looking at the data of the next group of antisocial individuals I thought it would be interesting to plot the most frequent reactions of a group which can be expected to differ most from our group of murderers. For this purpose I looked up Dr. Harrower's (4) data on theology students. The results bore out the expectations. The most frequent reactions of theology students are diametrically opposite to those of murderers in practically all of the eight factors (Table Id). The plus-minus "h", minus "s", plus "e", minus "d", plus "m" were the most frequent reactions of theology students; and these are exactly the responses for which we found the zero percentages in Table Ic, indicating the

[4] For more detailed discussion of the interpretation of various Ego-pictures the reader is again referred to Deri (2, Ch. 10).

most frequent reactions of murderers. We can also see that the most frequent reaction within the "p" factor is minus among the murderers and plus among the theology students. The only common frequent reaction among these two groups of subjects is the minus "k", which of course has to be evaluated very differently in two contexts as widely opposed as these.

Tables IIa, b, and c, present the data on 19 Parisian prostitutes. How do the profiles of these women — who live outside the accepted set of laws without, however, being antisocial in the same sense as the murderers—differ from those of the murderers? The plus "h" with minus "m" pattern is still present but with much more variability in the "m" factor than was shown in the murderer group. Plus "h" is still the root-factor (Table Ia), but not the minus "m". This means that the infantile need for sensual contact is the most stable unreleased need and has an intensity which is considerably more extreme than the plus "h" need of the murderers. Exclamation marks next to the plus "h's" in Table IIa mean that there were five or six pictures chosen in that direction. However, the prostitute group as a whole shows much less constancy in minus "m" than do the murderers; minus "m" is not one of the root-factors in the prostitute group. This has to be interpreted as less bitter renunciation of oral gratification, or in social terms, more positive attitude toward human beings. The symptomatic factors, i.e., the avenues for discharge, are completely different from the murderers' exhibitionistic, aggressive release, i.e., their open "hy" and "s" factors. The symptomatic reactions of prostitutes are those which we expect from the emotionally unstable, infantile psychopathic personality (4). Most imbalanced is the prostitutes' Contact Vector (see Degrees of Latency, Table IIa) which shows their inability to stick to any one love-object (open "d"), while the need for oral gratification is intense (unreleased "m"). The most frequent factorial reactions (Table IIb and c) show a mixture of unsublimated infantile drives (frequent plus "h" with plus "s"); signs of unstable and weak psychopathic features (open "e", open "d" and minus "m"); and neurotic features (minus "hy" with minus "k"). They do not show the accumulation of anger and tough object-orientation of the murderers (infrequent minus "e" and plus "d" in the prostitutes). However, the two groups share the same primitive Ego-structure (minus "k" with minus "p").

The prostitute group has much in common with our group of truant children (Tables IIIa and b). These restlessly wandering children who are unable to stay in one place for any length of time, show the same imbalance in their Contact Vector as the prostitutes, but with much stronger minus "m" tendency. As a matter of fact, in a lesser degree this is usual for seven-year-olds in general, as the Fancher, Lewis and Weinstein study (3) on 200 seven-year-olds has shown. This is the usual age of aimless searching for new objects (open "d") after having been forced to give up the original attachment to the mother (minus "m"). What differentiates these truant children from the healthier members of their age-group and also from the prostitutes, is the intensity and frequency of minus "e". The intensity of the accumulated anger, without possibility for direct release because of the control expressed in the minus "hy", is what keeps on driving these children in

TABLE V—Summary of Most Frequent Reactions In the Four Groups

	h	s	e	hy	k	p	d	m
0		Murderers					Prostitutes Truancy	Thieves
+	Murderers Prostitutes Thieves Truancy	Prostitutes Thieves Truancy		Murderers			Murderers Thieves	
−			Murderers Truancy Thieves	Prostitutes Truancy	Murderers Prostitutes Thieves Truancy	Murderers Prostitutes Truancy		Murderers Truancy Prostitutes Thieves
±								

a restless anxiousness. Even though the murderers had the same strong minus "e" tendency, they were not constantly "on the go" because of their more goal-directed and acted-out aggression (plus "d", open "hy and open "s").

Finally let us look at our group of 50 thieves. This group shows the most equal distribution of reactions compared to the other three groups. In other words, this group has the least characteristic pattern of reactions. The unsublimated, infantile plus "h" is still there as the most frequent "h" factorial reaction, but open and minus "m" occur with equal frequency; "s" is predominantly plus but minus "s" reactions appear with more frequency than in any of the other groups discussed above. Their emotional control is poor but dynamically they are less aggressive than the murderers as indicated by their Paroxysmal Vector (minus "e" and open "hy"). In our group of 50 thieves the frequency of minus "hy" shows some ability to control emotions and to hide feelings. Also the variability of the "p" factor in this group shows a higher degree of Ego development than any of the previous groups. The tendency for plus "d" and open "m" seems to be crucial in this group in conjunction with the plus "h" and plus "s". There is aggressive striving for environmental objects (plus "s" with plus "d") but the variability of the other reactions, particularly that of the "p" factor, shows that here there is less rigid "drivenness" than in the case of the murderers. More flexibility and self-awareness appear in the profiles of these thieves than in those of the murderers. Actually this is not a group of violent robbers but of thieves who used more subtle methods to get what they wanted.

Table V is a kind of a rough summary for the purpose of quick comparison of the most frequent reactions of the four antisocial groups described. The overall presence of the plus "h" and minus "m" shows the basic infantile character and oral frustration of these individuals, while the plus "s" and minus "e" reactions show the tendency to react with unsublimated aggression. The absence of minus "h" and minus "s" shows the untamable intensity of the infantile drives – in analytic terms, the unaltered intensity of the Id-drives. Neither of these groups is capable of aim-inhibited discharge of libido. Of course the undifferentiated Ego of a minus "k", minus "p" type, which is characteristic of all four of these groups, has no power to mold and channelize the socially unacceptable drives of the Id, except for some attempt at repression which easily breaks down under pressure.

These antisocial adults are similar to seven-year-old children whose Ego is easily directed by their Id, whose ability to inhibit motor acting-out (also an Ego-function) is weak (plus "s", minus "e") and who easily blame the world for their having been forced to give up the all-protective original ties to the mother (plus "h", minus "p", minus "m").

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The Discriminative Power of Szondi's Quotient of Tendency Tension

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It was the purpose of this study to investigate the discriminative powers of Szondi's quotient of tendency tension. As used in the Szondi test, the quotient of tendency tension is defined as the number of open responses yielded by a subject to the pictures of the eight factors divided by the number of ambivalent responses. This quotient reputedly represents a quantitative measure of the relationship between external and internal symptoms and is supposed to provide a means for the evaluation of the subject's actual behavior patterns. If the quotient is less than one, the subject's behavior is described as inhibited, rigid, and compulsive, as is demonstrated by compulsion neurotics, schizoid psychopaths, and schizophrenics. A normal subject yields a quotient that is between one and three. When the quotient exceeds five, the subject's behavior is typified by agitation, excitement, and lack of restraint, as is true in hysterical, epileptic, or manic-depressive patients.

METHOD

In order to determine the extent to which the quotient of tendency tension distinguishes (a) between normal individuals and psychopathological individuals, and (b) among different kinds of psychopathological personalities; the test was administered to a normal group, as well as to six different types of psychopathological groups. Along with each administration of the Szondi test, a pseudo-Szondi or control test was given. The control test, just as the Szondi test, consisted of 48 photographs, and was administered in six sets. The instructions were identical. However, the photographs employed in the control test were of individuals who were normal, or at least whose clinical normality was highly probable since each of them was selected with certain criteria in mind.

Criteria of Selection

Each of the photographed individuals was selected on the basis of:

1. A demonstration of the capacity for objective thinking.

2. Sufficient indication of reasonably effective interpersonal relationships.

In addition to the criteria pertaining to the personal qualifications of the individual photographed, there were other criteria of selection relating more directly to technical aspects of the photographs rather than to the kind of person pictorialized. These were:

1. Size—the photograph selected and physiognomy portrayed should be roughly similar in size to those on the Szondi test.

2. Expressive passivity—the individuals photographed should be expressively noncommittal rather than actively laughing, crying, fearful, or astonished.

3. Sartorial equality — sartorial peculiarities that might tend to encourage identification or rejection should be minimized. Hence, all of the selected individuals wore ties, white shirts, and jackets. Uniforms of any kind were excluded.

4. Equality of background effect — background characteristics that might tend to encourage identification or rejection should be minimized. Hence, no books, crosses, cigarettes, or flags were allowed.

5. Facial idiosyncrasies — facial idiosyncrasies that might tend to encourage identification or rejection should be minimized. Hence, the individuals selected did not have beards, gross asymmetries, or scars.

6. Race—all of the individuals pictured should be Caucasian, since this is apparently true for Szondi's test.

7. Sex — sexual characteristics that might tend to encourage identification or rejection should be equalized. Hence, all the selected individuals were men.

These criteria pertaining to the technical adequacy of selected photographs were formulated in order to minimize the probability of responsiveness to any aspect of the picture other than the physiognomy represented. The criteria pertaining to the personalities of the photographed individuals were designed in order to maximize the probability of clinical normality. Thus, for the most part, the men represented were individuals who have distinguished themselves in a discipline (such as medicine, law, mathematics, or the physical, social, and biological sciences), and who have held or are holding positions of administrative responsibility. They are individuals who are prominent, yet not eminent enough to be recognized by the general public. All subjects were questioned afterwards regarding recognitions. Although many respondents "recognized" "movie stars," "murderers," "dead people," "foreigners," in only one instance was it necessary to discard a record because of contamination attributable to genuine recognition.

Although clinical normality here exists as a probability rather than a certitude, it should be recognized that it is by no means necessary from the standpoint of test construction that each, or in fact any, of these individuals be the personification of clinical normality, whatever that may be. All that is necessary is that the homosexuals, if there be any, do not preponderate in the pseudo-homosexual category; that manics, if such there be, do not exist disproportionately in the pseudo-manic category, and so on for the other pseudo-categories.

Construction of Pseudo-categories

These pseudo-categories were constructed through the random assignment of the control photographs to sets and categories, these categories being identical to the eight diagnostic categories on the Szondi test. Thus, on the control test there existed the categories: homosexual (h), sadist (s), epileptic (e), hysteric (hy), catatonic schizophrenic (k), paranoid schizophrenic (p), manic (m), and depressive (d). However, on the control test these were purely nominal designations and did not describe the personalities of the individuals who comprised them. Each category on the control test had positional identity in administration with its corresponding category on the Szondi test. Hence, the first card in the first row of the first set was in the *k* category on both tests, the second card in the *s* category on both tests, and so on. The purpose of administering a control test was to test for the existence of similarities between quotients produced on the Szondi test and quotients produced on a control test, the scoring categories of which have been arranged through the

random assignment of photographs.

Sequence of Administrations

Each subject received two administrations of the Szondi test and two administrations of the control test. Since both tests were administered at one sitting, the question arose as to whether performance on the second test was influenced by the test preceding it. The question pertains most directly to the element of fatigue, and, in order to minimize the effect of potential contaminatory factors, the sequences of test administration were alternated so that one-fourth of all the subjects received the genuine Szondi test first at both experimental sessions, one-fourth received the Szondi test first on the first session and the control test first on the second session, one-fourth received the control test first at both sessions, and, finally, the remainder received the control test first on the first session and the Szondi test first on the second session.

Classification of Subjects

In all 104 subjects were tested, 32 of them presumably normal, the remaining 72 being patients at Norwalk State Hospital or Camarillo State Hospital. The psychopathological group was comprised of six subgroups, each of which had physiognomic representation on the Szondi test. These subgroups consisted of 12 nonpsychotic homosexuals, 12 psychotic epileptics, 12 paranoid schizophrenics, 12 catatonic schizophrenics, 12 manic-depressive depressives, and 12 manics. Each subgroup included six males and six females with the exception of the homosexuals, who were entirely male, and the depressives, who consisted of five males and seven females. Of the normal group, 17 were male and 15 were female. The normal group (and by "normal" is meant no more than being able to function adequately outside of a mental hospital) was constituted entirely of students, most of them being college seniors. Their mean age was 24.3 years, as compared with the mean age of 35.4 years for the psychopathological group. The mean interval between the two administrations was 2.8 days for the normal group and 2.6 for the psychopathological group.

Criticism of Method

Some procedural criticisms may be anticipated. As it is ordinarily employed, the clinical use of the Szondi test requires six to ten administrations to each subject. In answer to the anticipated criticism that this study loses something by virtue of the fact that it was not so administered, it may be noted that Szondi's tenfold procedure is most pertinent to the analysis of individuals rather than to the analysis of tests. In view of this, divergence from the orthodox procedure may be permitted. In the process of being tested, the test was given many more times than the ten administrations that would have allowed a Szondi psychodiagnostician sufficient evidence for clinical evaluation. Since the test has been given to 72 psychopathological subjects and 32 normal subjects, twice to each subject, it has been administered 208 times, and as a consequence is presumed to have been allowed sufficient opportunity to demonstrate its effectiveness. In addition, when working with groups, it is difficult to see why a third administration to each subject should be any better than the first or the second, or why the fourth should be so, or the fifth, and so on. Certainly, Szondi does not claim that these later administrations are more meaningful or valid.

Conceivably, when working with a given individual, it is possible that a profile obtained from a test administered late in the series might have some special meaning—this because of some idiosyncratic cyclical occurrence that influenced responsiveness at this particular stage in the testing procedure. But the point is that such cyclical occurrences are idiosyncratic, and hence are cancelled out when merged with group trends. Thus it may be assumed that because of the fact of nonsynchronization of idiosyncratic cycles, the second administration is as good as the sixth since there will be as many individuals who will be as especially responsive to the second administration as there are to the sixth.

Nor can it be legitimately maintained that the assumption of nonsynchronization is unjustified because such psychological variables as boredom, practice effects, memory effects, etc., do indeed exert a synchronous influence on later administrations in such a way that the performance of a group is significantly different from its previous performance on an early administration. According to Szondi's rationale, directional changes occur as a consequence of changes in tensions in need-systems that are associated with particular test categories. Such changes are idiosyncratic. The aforementioned psychological variables are not formally considered as determinants of subsequent responsiveness. Therefore, to the extent that such variables as boredom, practice effects, and memory effects do actually contaminate later performance, Szondi test rationale is inadequate in so far as it does not take this into account. On the other hand, if such variables are not considered as influential determinants of performance, this study cannot be criticized for disregarding their possibly synchronous effect in later group performance.

RESULTS

An inspection of the data in the Tables reveals the following information with respect to the quotients:

1. As expected, the quotient of tendency tension is between one and three for the normal group on the Szondi test, but this is also true for the normal group on the control test. In fact, all groups on both tests had quotients between one and three.

2. The quotients for the schizophrenics groups are not, as stated by Szondi, less than one. In fact, the paranoid schizophrenic group yielded the highest quotients on the Szondi test, and the catatonic quotient exceeded the manic and epileptic quotients.

3. The quotients (combined) for the manic, depressive, and epileptic groups are not high as expected, and in no case do they exceed two, much less five. They occupy ranks six, two, and five, respectively on the Szondi test, and ranks four, two, and six on the control test.

Moreover there is little indication of any kind of resurgency on the part of the epileptic, manic, and depressive Szondi quotients, all of which decreased from the first administration to the second, while the paranoid and catatonics increased. All such differences however, probably fall within the range of chance. In view of the previously discussed improbabilities with respect to synchronous cyclism among all the members of a group, it is difficult to entertain the possibility that more administrations would have produced grossly different results.

It may be of interest to note that the mean value of the Szondi combined quotients of all the psychopathological groups is 1.70, while as indicated in Table I, it is 1.70 for the normal group. On the control test this value is 1.63 for the normal group, and 1.61 for all psychopathological groups.

Summary and Conclusion

It was the purpose of this study to investigate the discriminative power of Szondi's quotient of tendency tension by studying the extent to which such quotients were differentially produced by different clinical groups. The subjects included 32 presumably normal individuals, and 72 psychopathological individuals. The latter group was comprised of nonpsychotic homosexuals, psychotic epileptics, paranoid schizophrenics, catatonic schizophrenics, manic depressive depressives, and manics. Each group was given two administrations of the Szondi test and two administrations of a control test which was constructed through the use of photographs of presumably normal individuals. These photographs were randomly assigned to eight categories, each of which had positioned identity in administration with corresponding categories on the Szondi test.

It was found that the quotient of tendency tension did not manifest its imputed discriminative function.

Table I—Quotients of Tendency Tension on the Szondi Test

Groups	Administrations		
	First	Second	Combined*
Homosexual	1.43	1.82	1.60
Epileptic	1.67	1.36	1.50
Catatonic	1.44	1.67	1.55
Paranoid	2.46	2.50	2.48
Depressive	1.67	1.64	1.65
Manic	1.60	1.29	1.42
Normal	1.82	1.59	1.70

*Combined quotients of tendency tension are drawn from the raw data, and hence will not necessarily equal the mean of the first and second administration quotients.

Table II—Quotients of Tendency Tension on the Control Test

Groups	Administrations		
	First	Second	Combined*
Homosexual	1.38	2.50	1.87
Epileptic	1.31	1.50	1.40
Catatonic	1.17	1.71	1.41
Paranoid	1.62	1.91	1.74
Depressive	1.61	2.10	1.83
Manic	1.42	1.42	1.42
Normal	1.55	1.72	1.63

*Combined quotients of tendency tension are drawn from the raw data, and hence will not necessarily equal the mean of the first and second administration quotients.

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The Szondi Test in a Psychological Battery: Two Case Studies

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This article is an attempt to illustrate what the Szondi Test reveals in the areas of personality functioning and dynamics. Clinical experience with the test suggests that in the aspects which it stresses, it often has advantages which most other tests are not especially able to elicit. These advantages, however, should probably not be regarded as data to be regularly expected in Szondi Test interpretations. It seems that one cannot predict in which test the most relevant or important information is to be found. In the two following examples, the Szondi happens to have particular merits which are not readily seen from the other tests.

In both of these cases, full psychological testing was done; this included, in addition to the Szondi profiles, Rorschach, TAT, Wechsler-Bellevue I, Figure Drawing, and Bender Gestalt. Although the Szondis were originally evaluated in conjunction with the remaining tests and case history materials they are presented here as if they were independent interpretations; at least simulations of independent interpretations. In the strictest sense, one must of course concede that this is not quite possible for any interpreter. The Rorschachs and Wechslers are to be presented also with a view toward comparing, confirming and contrasting Szondi Test findings.

CASE X

X is a 16 year old girl, who, prior to admission to this institution, resided with her parents in a large city. She had an older married sister who lived away from the family. X was in her first year of high school and the family was of average economic status.

Szondi Interpretation:

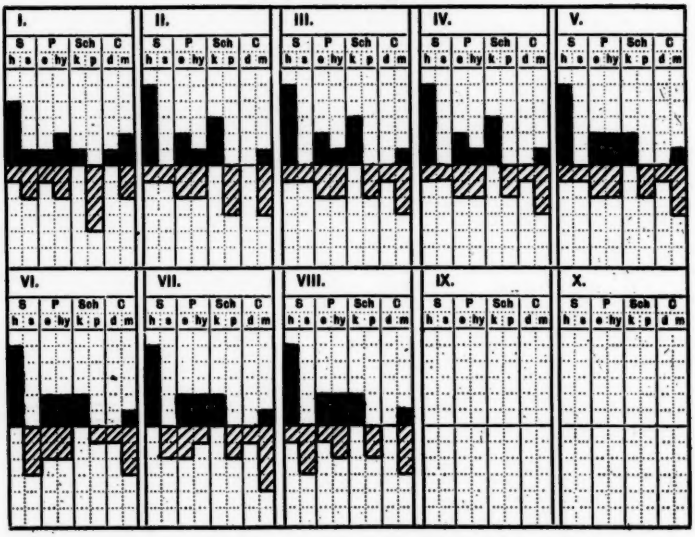
As seen from the drive formula, the root factor *(Wurzel-Faktoren)* is minus m. It is so classified since the m factor is more discrepant with its twin factor (d) than any other factor is with its own twin. The discrepancy is the difference between the sum of symptomatic reactions (open or ambivalent) between twin factors. The root factor being minus m means that the psychological drives which are represented by minus m comprise the core, the deepest and most dynamic influences of this personality. In this respect, the next most important factor is plus h.

With no more information than this particular combination of root factors, we can make some fairly definite inferences about the whole personality. Both factors are psychologically related to one another in that they reveal how the subject deals with needs to be dependent, receptive, passive, in short to be taken care of. The h factor is consistently loaded in a plus direction; hence X is urgently in need of and hungers for protective warmth. But with m consistently minus, there is always the anticipation that dependency needs will be frustrated and that she can trust nobody. It is therefore quite painful for X to allow herself to be receptive. This pattern of wanting to get and feel-

Name: X Alter: 16 Beruf:

Szondi-Test

Blatt mit zehn Triebprofilen



1947		S		P		Sch		C		Σ	Σ	Σ
	Nr.	h	s	e	hy	k	p	d	m	0	±	0 u. ±
	I.	+	−	0	±	0	−	0	±	3	2	5
	II.	+	0	±	−	+	−	0	−	2	1	3
	III.	+	0	±	−	+	−	0	−	2	1	3
	IV.	+	0	±	−	+	−	0	−	2	1	3
	V.	+	0	±	±	+	−	0	−	2	2	4
	VI.	+	−	±	±	+	0	0	−	2	2	4
	VII.	+	−	±	+	+	−	0	−	1	1	2
	VIII.	+	−	+	±	+	−	0	−	1	1	2
	IX.											
	X.											
Σ	0	0	4	1	0	1	1	8	0	15		
Σ	±	0	0	6	4	0	0	0	1		11	
T. sp. G.		0	4	7	4	1	1	8	1			26
Latenzgrösse		S = 4. h+		P = 3. hy−		Sch = 0. K+P−		C = 7. m−				

1. Tendenzspannungsquotient $= \frac{\Sigma 0}{\Sigma \pm} = \frac{15}{11} = 1.4$

2. Triebformel:

Symptomatische:	Od, ± e
Submanifeste bzw. sublatente:	0 e, ± hy +k, −P
Wurzel-Faktoren:	m−, h+

3. Latenzproportionen:

$$\frac{7}{Cm-} : \frac{4}{Sh+} : \frac{3}{Phy-} : \frac{0}{Sch\,K+P-}$$

4. Triebklasse: Cm−

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FIGURE 1 Eight Profiles of a 16 Year Old Girl

ing threats of rejection represents the core problem.

The remaining factors and their interrelations plus the rest of the quantitative data yield clues which suggest the outcome or resolution of this nuclear problem. First to be considered is the *Tendenzpannungsquotient,* or the sum of open responses divided by the sum of ambivalent responses. This ratio is an index of the degree of activity or constriction. One may also think of it in terms of how much energy is being expended in participating with objects in one's surroundings. The "normal" ratio falls between 1.5 and 2.5. In this instance, it is 1.4, which suggests that X is rather constrictive and i n a c t i v e . This seems to be due to overt and conscious blocking incurred by ambivalent feelings.

With the exception of one plus-minus response in the m factor, all the ambivalent reactions occur in the P Vector. Next to factor d, which is consistently open, the most symptomatic factor is plus-minus e. This ambivalence concerns the co-existence of conscious feelings of both hostility (minus e) and inhibiting moralistic influences (plus e); in short, X is guilt ridden. While the picture thus far portrayed is not one of an acting-out character, a tendency in this direction is suggested by the exhibitionistic quality of the four ambivalent hy reactions and the open s. However, both these factors vary in a minus direction. Here it is interesting to note that when hy changes from minus to ambivalent, (between profiles IV and V) the inhibiting controls are demonstrated by the s factor moving from open to minus (between profiles V and VI).

From this, one would infer a lack of a stable, reliable mode of defense and control. The ambivalence in the P Vector indicates a good deal of restlessness and inability to express feelings directly. In line with this, open s and open d indicate an inability to fixate or concentrate on objects. That the d factor is entirely open (no choice at all in profiles II and VIII) reinforces this impression. In the writer's experience completely open d reactions are more frequently associated with catatonic schizophrenia than with any other diagnostic category.

The next diagnostic consideration is what kind of ego functioning is associated with characterizations of tenuous, unsatisfying object relations and of tense, restless and ambivalent affective expression. The ego pattern of plus k, minus p is one of stubborn adherence to one's sense of omnipotence. The lack of even a simple minus k choice in all eight profiles is an indication of how lacking X is in the usual awareness of external impositions and limits. Conversely, the absences of any plus p choices indicates her profound lack of insight regarding her own impulses. This, to say the least, is an extremely childish, undeveloped ego. In the first profile, open k with loaded minus p suggests a trend toward exaggerated projection, for some expression of paranoid ideation.

The total impression is one of an extreme lack of development rather than regression. However, the pattern of plus h, minus p, open d, minus m is typically schizophrenic. Certainly, the deep-seated oral frustration, the loose object relations and omnipotent unconsciously projecting ego are consistent with this diagnosis. One would predict from the general instability that paranoid tendencies would be vague rather than a fixed delusional form. X is a quite unhappy, guilty individual. The guilt probably accumulates as a result of her

inability to focus hostile feelings directly upon some external object. For this reason, whatever acting out may be present is probably of a diffuse sort; she may complain about everybody. Overt aggression is certainly suggested by the loaded plus h with open s, minus p and minus m. However, since s is basically a minus reaction, it is probable that much of the hostility is turned upon the self in the form of generalized inhibitedness. Some depressive moodiness is also suggested by the ambivalent m reaction on the first profile. From the root factor of minus m and the inferences about the central, dynamic conflict, the guilt may originate from unconscious destructive wishes toward a rejecting mother.

Wechsler-Bellevue

Verbal Scale I.Q.	79		
Performance Scale I.Q.	93		
Full Scale I.Q.	84		
Information	6	Picture Arrangement	9
Comprehension	7	Picture Completion	6
Digit Span	6	Block Design	7
Arithmetic	3	Object Assembly	13
Similarities	8	Digit Symbol	11
Vocabulary	6		

Information

Correct — 1 through 4, 8, 9, 16; 5— PINTS — "4"; 6— WEEKS — "42"; 7— ITALY — "Genoa"; 10, 11— "don't know"; 12— PARIS — "over a 1000 miles, 1500 miles"; 13— HEART — "beats, I don't know"; 14— HAMLET — "don't know"; 15— POPULATION — "40 million"; 17— POLE — "don't know"; 18— EGYPT — "on the other side"; 19— H. FINN — "I don't know anything about it"; 20 through 25 "don't know."

Comprehension

Correct 1, 3; 2— THEATER — "You should warn people and not just go yourself"; 4— TAXES — "I don't know"; 5— SHOES — "More comfortable"; 6— LAND — "It's bigger (?) I don't know"; 7— FOREST — "I don't know; I'd try to get help"; 8— LAWS — "So people wouldn't do what they wanted"; 9— MARRIAGE — "I don't know"; 10— DEAF — "Cause they can't hear."

Digit Span

Correct five forward and four backward.

Arithmetic

Correct— 1 through 3; 4— "don't know"; 5— "72"; 6— "46"; 7— "45."

Similarities

Correct — 1, 2, 3, 5; 4— WAGON-BICYCLE — "Toys, I don't know"; 6, 7, 10, 11 and 12— "I don't know"; 8— EYE-EAR — "They are features"; 9— EGG-SEED— "I don't know what to say."

Vocabulary

Correct— 1 through 7, 9, 10, 12, 13; 8— SHILLING — "don't know"; 11— NAIL — "Fix something; they hammer it"; 14 through 21 — "don't know."

Picture Arrangement

Correct — 1 through 4; 5— TAXI-SAMULE; 6— FISH-EFGIHJ.

Picture Completion

Correct— 1, 2, 3, 6, 8, 12, 15; 4— DIAMOND — "two"; 5— LEG — "Head"; 7— STACKS — "Porthole"; 9— WATER — "wrong position"; 11— ARM-IMAGE — "different in the mirror"; 13— BASE THREAD — "It's broken"; 14— EYEBROW — "Don't know."

Block Design

Correct— 1 through 5; 1— 7 seconds; 2— 73 seconds; 3— 50 seconds; 4— 32 seconds; 5— 80 seconds; 6— 180 seconds; 7— 180 seconds. Raw scores of 5, 3, 3, 3, 3, 0, 0.

Object Assembly

All correct— 1— MAN — 18 seconds; 2— PROFILE — 20 seconds, 3— HAND — 46 seconds.

Digit Symbol

Correct— 47, no errors.

The meagre intellectual development correlates well with the Szondi picture of infantilism and low capacity for sublimation. The latter was evidenced from the high number of loaded factors which in-

dicate that X is too tense to be an achieving individual. The restlessness and inability to fixate, shown in the Szondi by open s, open d, and ambivalent e and hy, are here reflected in the low scores on tests of attention and concentration like Digit Span, Arithmetic and Picture Completion. The high score on Object Assembly, especially the rapid completion of the Profile is interesting in the light of the patient's preoccupation with her own face; this data will be presented below in the social history. Evidence of psychosis, which is clear in the Szondi can perhaps be derived from the Wechsler from the stereotypy and repetitiousness of her responses. On close inspection, there are some rather autistic answers like BASE THREAD on Picture Completion ("It's broken). Also, to be noted is the sudden fluctuation in efficiency on Block Design; item 1 was completed in 7 seconds, while on item 2, she took 73 seconds.

Rorschach

W 2	R, 11, 1	
D 7	FM 1	Hd 1
d 1	F 10	A 9
Dd 1		Lscp 1

Rejections: IV and VII

Tabulation

W:M	2:0
M:C	0:0
(H+A) : (Hd+Ad)	9:1
No. R Cds VIII, IX, X	55%
R	
A%	82%
P	3
F+%	82%
F%	90%
T/IR (B)	22 sec.
T/IR (C)	31 sec.

CARD I

1. A dog-that in the middle looks like . . . Two dogs. I don't know, it's silly.
D F+ A

a. Some kind of insect . . . those little parts here.
d F A

CARD II

1. Gads I don't know what this is. These look like, more like dogs than the other one . . . It's the only thing it looks like.
D F+ A P

CARD III

1. Some kind of animal or something. These are hard or something. That's all I can see . . . Some kind of creature. I don't know what it looks like. I couldn't think of anything else, it's imaginary-I like animals anyway. They are cute.
D F A

CARD IV

1. I don't know that one at all. I don't know. Can't make out what it is . . . It's a hard one. Do you know what that is?
Rejection

CARD V

1. A butterfly uh huh . . . The whole thing-I don't know what a butterfly looks like-I don't know if they are wings or what I thought. Those are the lines from the form I guess.
W F+ A P

CARD VI

1. Let's see, this looks like-can't make out what this is. Some kind of bug or something. Kind of big though . . . The head I guess. The rest too-the body I guess I don't know.
W F+ A

CARD VII

1. I don't know what this is.
Rejection

CARD VIII

1. Looks like some kind of animal right here. Don't know what rest is . . . It's between a bear and . . . I guess that. I don't know. It's got sort of legs. It's just standing on something. I don't know.
D F M+ A P

2. Rocks . . . I didn't know what else to say I guess. In the west, a something.
D F L S

CARD IX

1. I don't know. Face of a deer here . . . The way those things there-I don't know. The face I guess. I don't know. (giggles)
Dd F+ A

2. There is something here. Could be a person. Is it? (looks up) . . . Pink-OH! that wouldn't look like a person would it? I don't know. The head or something-the face. I don't know.
D F+ Hd

A buffalo or something. Couldn't be a green one . . . Can't see it. Did I say a buffalo?
Denied

CARD X

1. Those aren't deers are they? . . . Cause of the legs or something I guess. I don't know-shape-uh-I don't know.
D F+ A

2. That's a bull? no? . . . Did I say it was a bull? I don't know-it's not clear, some place around there.
D F A

That's all I can find.

On the Rorschach, stereotypy and constriction are both present to a marked degree. Here, again the evidence for schizophrenia is mainly a matter of hindsight as this is by no means, a typically psychotic protocol. The form level varies from vagueness to accuracy. There are no bizarre or highly autistic responses. The record shows a good deal of concreteness and many expressions of inability but they are probably reflections of the patient's limited intelligence. This particular Rorschach does not yield nearly as much dynamic or content material as does the Szondi. In this case, the Szondi test can be said to serve a function of centering and anchoring the data of the entire battery. The remaining tests, in a way, complement and augment the Szondi findings.

Historical Data

X had been seen frequently at psychiatric clinics because of difficulties at school and at home since the age of eleven. She was retarded at school and had a reading disability. A social worker's report stated that X " . . . had to cope with a very disturbing and destructive home environment in which the mother reacted to her as a sibling and treated the other sister as a mother figure. The mother also pushed the patient into a very threatening seductive relationship with the father suggesting on occasion that she sleep in the same bed with him." The mother represented the older sister as good and X as bad. The father was affectionate towards X but passive and ruled by the mother. From an early age X bit and hit people when angry. There was much arguing at meals and discussion about the importance of food. X had grown up with two neighbor girls of similar age. They had always been good friends but of late X would grow tired, lose patience with them and weep.

Just prior to admission to this institution she had been truanting quite often. At school, upon one occasion, she had thrown her books on the floor and exclaimed loudly to the class that the students were "looking at me funny." At home she spent hour after hour looking into a mirror, worrying that she was ugly, that her nose was growing longer, that everybody stared at her. There were many sleepless nights and some talk about suicide. Apparently, this was a threat she held over her mother. The family could not control her and upon the advice of psychiatrists had her committed.

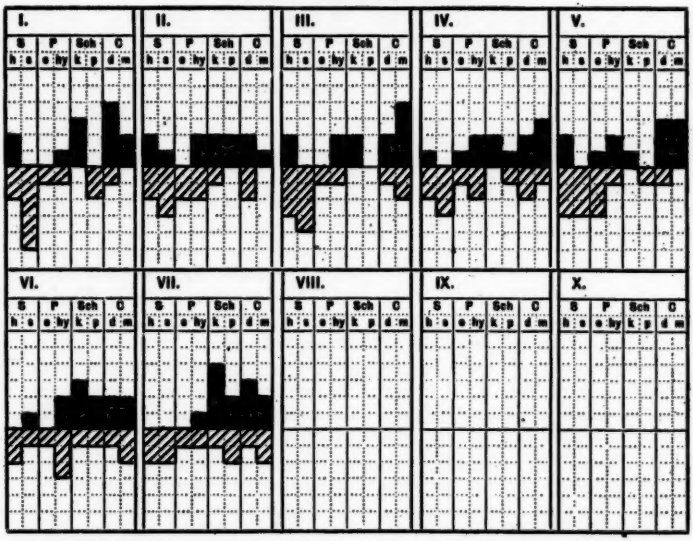
In the institution, X was described as well formed, nice looking, a youngster who was shy, uncommunicative and lacking in expressiveness. She related that she had been sexually assaulted by two men several months prior to committment. For the most part she was passive, unobtrusive and attended Occupational Therapy. Occasionally, she would have an angry spell and denounce and insult hospital personnel.

She was diagnosed as schizophrenic, after some deliberations about psychoneurosis and schizoid personality. The paranoid trend

Name: Y Alter: 29 Beruf:

Szondi-Test

Blatt mit zehn Triebprofilen



1947		S		P		Sch		C		Σ	Σ	Σ
	Nr.	h	s	e	hy	k	p	d	m	0	±	0 u. ±
	I.	±	−	0	0	+	−	+	+	2	1	3
	II.	±	−	−	±	+	+	±	0	1	3	4
	III.	±	−	0	+	+	0	+	±	2	2	4
	IV.	−	−	0	±	+	0	±	+	2	2	4
	V.	±	−	−	+	0	0	+	+	2	1	3
	VI.	−	0	0	±	+	+	+	±	2	2	4
	VII.	−	−	0	0	+	±	+	±	2	2	4
	VIII.											
	IX.											
	X.											
Σ	0	0	1	5	2	1	3	0	1	13		
Σ	±	4	0	0	3	0	1	2	3		13	
T. sp. G.		4	1	5	5	1	4	2	4			26
Latenzgrösse		S = 3/Sa−		P = 0/a−, hy+		Sch = 3/k+		C = 2/d+				

1. Tendenzspannungsquotient $= \frac{\Sigma 0}{\Sigma \pm} = \frac{13}{13} = 1.0$

2. Triebformel:

Symptomatische:	e o, hy ± o, h ±
Submanifeste bzw. sublatente:	p+, d+ m ±
Wurzel-Faktoren:	Sa − k+

3. Latenzproportionen:

$$\frac{3}{Sa-} : \frac{3}{Sch\,k+} : \frac{2}{Cd+} : \frac{0}{Pe-, hy+}$$

4. Triebklasse:

Sa−, Sch k+

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FIGURE 2 Seven Profiles of a 29 Year Old Man

was not long-lasting. It seemed to serve as an emergency reaction determined by the chronic situation at home and new fears about being unattractive, wanting to look like a movie star and ideas about pregnancy.

CASE Y

Y is a 29 year old male veteran, who has been married and separated three or four times. He is the third of four siblings. His parents were divorced when Y was 15 years of age. He was reared in a small town.

Szondi Interpretation:

Between profiles V and VI there was an interval of almost eleven months, during which Y had been discharged from the institution. Profiles VI and VII were taken upon his voluntary return. It is interesting to note the similarity between the last two profiles and the first five. The last two seem to elicit in sharper relief some of the disturbance suggested by the previous ones.

This is a very complex personality in which there are markedly divergent and contradictory features. The steady minus s and plus k with minus h reactions indicate a highly intellectual person who has, to a large extent, diverted physical needs into intellectual strivings and attainments. This is fairly typical of well-functioning individuals in intellectual occupations in that they are often capable of a high degree of sublimation. Here, the sublimation is present but not quite successful. The man is troubled by homoerotic impulses as is revealed by the plus-minus h reaction on four profiles. Judging from the minus s, the expression of homosexuality w o u l d probably take a passive form.

That s is negative and loaded on occasion, points to a markedly self-punitive trend as well as extreme sensitivity. Evidence of depression is also quite clear from the constellation of plus d and plus-minus m. Y has a very possessive but inconsistent attachment to objects (loaded plus d on Profile I), needs to control and dominate them. At the same time, he has to depend and lean on others but experiences a feeling of their being unavailable to him. This is typical for depression on the Szondi Test. One possible solution for him is to undergo periods of apathy and withdrawal (open m). But never is Y's interest in external objects diminished for very long. He has to possess many objects and may show a restless search from one to the other. However, he always seems to find something unsatisfactory; the depressive dilemma shows up well on the last two profiles, which marked his return to the institution.

The depression is likely to include suicidal preoccupation; in this, the minus s, plus d and plus-minus m are abetted by the presence of plus k, especially the loaded plus k on the last profile. Plus k implies a taking in of external objects and since Y's are ambivalently invested, his taking them into his own ego has the inevitable consequence of punishment from within. One contradictory aspect may be mentioned here. Y has a disturbing problem concerning his passivity and feminine interests, yet his search for dependency has a very tenacious and aggressive quality. Hence, he may use passivity (homoerotic submission or ingratiation) in order to attain essentially aggressive aims of control and manipulation.

The ego picture, plus k, plus p, is generally that of a sophisticated, talented person, who is keen to perceive what goes on within himself concerning his motivation and

thoughts. Y has some of these qualities, however in this setting, it is an overly sophisticated, intellectually grandiose and blown up ego. The p factor, in having all types of reactions, indicates paranoid pathology. Y feels persecuted, but probably is more prone to emphasize his megalomania. He needs an audience to feed his self-love: this is derived from the plus k and plus hy trends. Moreover, the opening of both factors in the ego vector on Profile V suggests at least a trend toward weakened defenses and regressive adaptations. And from the foregoing one may see in this person the oscillatory behavior of discouragement and withdrawal, and desperate flights toward people for contact and security.

In the emotional (Paroxysmal) Vector the lack of control and immaturity are outstanding. The trends of minus e and plus hy are the antithesis of self-composure and serenity. Y is labile, exhibitionistic and tends to drain off hostile tensions in a showy childish way. The openess of the e factor precludes the existence of steady accumulations of tension and sudden outbursts. Rather, Y is constantly unhappy and complaining. Perhaps, it is an ability to get others interested and concerned, that helps to prevent more drastic consequences, such as a schizophrenic regression. The P vectorial constellation is one which is sometimes given by antisocial personalities. However, Y, with his tendency to intellectualize and drain off disturbing emotions, is more likely to be a nuisance than a social menace.

The S and Sch vectors indicate potentialities of a gifted well-functioning person but the profiles as a whole show a very troubled, depressed, self-centered, childish, demanding person. Based on the coupling of a sophisticated, over-intellectualized ego with infantile emotional expressiveness, the diagnosis could well be that of psychopathic personality.

Wechsler-Bellevue

Verbal Scale I.Q.	139
Performance Scale I.Q.	129
Full Scale I.Q.	137

Information	18	Picture Arrangement	14
Comprehension	15	Picture Completion	13
Digit Span	17	Block Design	15
Arithmetic	15	Object Assembly	12
Similarities	17	Digit Symbol	16
Vocabulary	14		

Information

All correct.

Comprehension

Correct – 1, 2, 3, 4, 6, 7, 10; 5– SHOES – "Flexible and strong, those two together"; 8– LAWS – "To control the actions of those who are misanthropic"; 9– MARRIAGE – "It will be able to pass on the forthcoming marriage and provide statistics."

Digit Span

All correct on first tries.

Arithmetic

All correct but 9– "90"; all answers given within 3 seconds.

Similarities

Correct 1 through 5, 8, 9, 10, 12; 6– AIR-WATER – "Both have oxygen"; 7– WOOD-A L C O H O L – "Fuel"; 11 – PRAISE-PUNISHMENT – "Reactions to one's conduct."

Vocabulary

Correct 1 through 25, 28, 29, 31, 32, 34, 35, 38; 26– AFFLICTION – "Something harmful"; 27– PEWTER – "Plastic, think they make wares out of them"; 30– SPANGLE – "Ornament for dress"; 33– MANTIS – "Kind of animal, don't know what kind"; 36– DILATORY – "Lazy"; 37– AMANUENSIS – "Don't know"; 40– ASEPTIC – "Chemically immaculate"; 41– FLOUT – "To defy"; 42 – TRADUCE – "To violate a code or a situation or a person."

Picture Arrangement

All correct; three credits for time on 5–TAXI.

Picture Completion

All correct except 5— LEGS — "Connections" and 14— EYEBROW — "Ears."

Block Design

1— 5 sec.; 2— 11 sec.; 3— 10 sec.; 4— 12 sec.; 5— 20 sec.; 6— 57 sec.; 7— 115 sec. All correct scores with time bonuses of 6, 4, 5, 5, 6, 4, 4, respectively.

Object Assembly

All correct; scores of 6, 7, 8.

Digit Symbol

All correct within 87 seconds.

The Full Scale I. Q. of 137 more than coincides with the Szondi Test suggestion of intellectual qualities. Y is intellectually gifted and also shows a lot of striving in the accumulation of knowledge. Information exceeds Comprehension and Vocabulary. An interesting discrepancy appears between the two tests as regards the stress on depression in the Szondi. The Wechsler indicates, in contrast to any kind of retardation, an over-all, highly efficient level of functioning. Moreover, the maximal results on Digit Span and Digit Symbol suggest that Y organizes and mobilizes himself effectively against anxiety in situations that necessitate this. The Wechsler test was such a situation for him; he had expressed a need to make a very high I. Q. The over-striving and over-achieving nature of this person is reflected in sporadic verbalizations of an essentially glib adolescent quality; for example, the answer to LAWS on Comprehension, "To control the actions of those who are misanthropic."

Rorschach

R, 27

W	11	M	1	H	0
DW	1	FM	3	Hd	1,1
D	14	m	2	A	8
d	1	k	1	Ad	4,1
		FK	1	Aobj	3
		F	9,2	At	1
		Fc	2	Sex	0,2
		c	1	Obj	2
		C′	1,2	Pl	4
		FC	3	N	1
		CF	3	Map	2
				Cg	1,1

Tabulation

W:M	12:1
M:C	1:4.5
(H+A) : (Hd+Ad)	8:5
No. R Cds VIII, IX, X / R	41%
A%	55%
P	5
F+%	75%
F%	33%
T/IR (B)	10.2 sec.
T/IR (C)	8.8 sec.

CARD I — 10 sec.

1. Looks like fur rug . . . In its entirety, the identical shape of both sides as though it were taken from some animal, split and then the ink gives the impression of texture of fur.
W cF Aobj

2. Or could be a relief map of some island . . . Just the contrast between white and black, white border in geography.
W kF map

3. Some grotesque sea creature . . . Oh these two little things on the claws, claw-like thing, oh that part suggests that the entire thing is a sea creature, oh those things always seem weird to me.
DW Fm— (A)

CARD II — 25 sec.

1. Don't know why but it reminds me of one of those pneumatic baby seats . . . All of the black. Shape mostly. Rubber, inflated like an inner tube, toilet seat.
W F— Obj

2. Now that makes me think of a rattlesnake's head . . . This little projectile here, the shape, of course it's obviously a phallic symbol. Shape.
D F+ Ad, Sex

3. These two red things reminds me of Walt Disney's cartoons of the crows . . . A little band of white around their neck, just reminds me of cartoon of crows. Just the head and neck. Nose, what seems to be.

CARD III — 5 sec.

1. This reminds me of crows bowling. . . . All of the black, that neck business,

contrasting color the black. It's lighter here, as though crows were dressed in tuxedos. Two bowling balls.
W M+ (FC') (H)

2. That reminds me of a butterfly . . . Shape. I like the color.
D FC+ A

CARD IV — 18 sec.

This reminds me of some fur animal. . . . Just the seeming texture I get there and this shaped head. All of it. These look like eyes. The identity of the two sides suggest the taxidermist's work. No, just the bare suggestion.
W Fc+ Aobj

2. These two make me think of boots, big rubber boots, like fishing boots . . . Just the shape and black color. Boots are black, fishing boots. These look like horse's tails.
D FC'+ Obj P

CARD V — 5 sec.

1. Makes me think of a butterfly . . . All of it. Looks like feelers, unimportant of course.
W F+ A P

2. These on the end remind me of a greyhound dog running very fast . . . Just this lighter portion suggests the head and extended forepaw. His head is usually long and thin.
D FM— Ad

CARD VI — 3 sec.

Looks like a fox fur that has been splattered out on the floor . . . All of it. This looks like the flattened head of a fox. Squashed out. Just the seeming texture of fur. Animal fur. These seem to be legs. I mean flattened out (Touches card with palm)
W Fc+ (FM) Aobj P

CARD VII — 15 sec.

This, these two remind me of kewpie dolls with some sort of ornament on their heads . . . But the shape of their-but the head, little bit of the neck. Shape-except that you'd have to call that an ornament or something, oh, nose and mouth. Looks like a child or doll, immature just the shape.
D F+ (Hd)

2. And the whole makes me think of a chain of islands . . . Oh they look like connected islands anywhere along the coastlines, Alaska or somewhere. From an airplane or on a map.
W FK+ map

3. This looks like the anal region of someone . . . That looks like someone's buttocks. You know in the army the way they stoop over. Looks like two hips.
D Fm+ At (Hd) (Anal)

CARD VIII — 2 sec.

1. Looks like an orchid . . . The shape and the vivid colors, all of it. Just the whole thing.
W CF Pl

2. This blue portion looks like a woman's corset . . . The color and that looks like lace in there.
Ds FC Cg

3. These two look like moles climbing up perpendicular I think . . . Shape.
D FM+ A

4. This top portion looks like the roots of a tree in the ground . . . Shape or contour. As though it were a diagram of what is actually underground or a representation.
D F+ Pl

CARD IX — 7 sec.

1. Also looks like some kind of flower. . . . The color and vaguely the shape of it all.
W CF Pl

2. These here up there look like the claws of a crab . . . Shape.
d F+ Ad

CARD X — 5 sec.

1. Looks like marine life . . . Just all these different objects.
W CF N P

2. This looks like the base of a tree . . . The base and the little mound of earth and it.
D F+ M

3. For some reason these look like deers in flight. Santa Claus reindeers, you know the allegory of Santa Claus . . . These greyish things. Its feet and little tail.
D FM+ A

4. These two blue things look like crabs . . . Shape. Just all those tentacles.
D F+ A

5. These two green things look somewhat like grasshoppers . . . Shape and color.
D FC+ A

The productivity on this Rorschach is incommensurately meagre in view of the Wechsler I. Q. Also, the A% and the single M response point to the impoverishment and emptiness of this personality. These two findings corroborate and "fit in" with the Szondi Test's "blown up ego." The Rorschach response on Card II of a "pneumatic baby seat" can be taken as a reflection of a self-concept; that is, being inflated but empty inside. Further, this response plus the third on Card VII, "the anal region of someone" indicates Y's preoccupation with anal homoerotism and anal functions in general. This, too, is consistent with the Szondi picture. The map responses and the loose color (e.g. W CF Flower) indicate evasiveness and tendencies to look for easy ways of problem solution. Apparently, Y expends little energy in matters of control and socialized responsiveness. On the Szondi Test depression is stressed but it is not so obvious on the Rorschach. The whole protocol with its glibness and pseudo-sophistication suggests an attempt to deny depression or defend against it. But responses like "fox fur that's been splattered on the floor" (Card VI) and "roots of a tree in the ground" (Card VIII) hint that there may be actual periods of deep depression. The latter response is presented as a sign of depression on the basis that it has frequently been found in Rorschachs of depressed patients.

In contrast to Case X, both the Wechsler and Rorschach in this case are quite rich and diagnostically suggestive. Here, one has much more opportunity to test and validate hypotheses from the Szondi Test.

Historical Data

As a child Y had an illness with a long period of unconsciousness and subsequent, but temporary loss of sphincter control. Later he described this period as a happy one because people were nice to him. He has been described as "troublesome and difficult" following this illness but he had been more of a problem than the other siblings even prior to it.

There were high intellectual standards in this home but apparently, it was disturbing enough for Y to run away on numerous occasions. In adolescence he spent several years in a reform school and these were not unhappy. He gained recognition in this school because of his intellectual brilliance. Y spent much time wandering all over the country; he would come upon a town or city, find the public library and "educate" himself. He stated that he "devoured" the contents of many books, including psychiatric text-books.

His haphazard marriages were usually terminated when his current spouse would refuse to accompany him on his wanderings. They were usually consummated in impulsive fashion. Y had also had homosexual relationships, attaching himself to men who supported him. He, at times resorted to blackmail attempts and once practiced psychotherapy at a handsome fee.

For several years he had been in and out of institutions. He entered allegedly in order to find food, shelter and security. On leaving he would get numerous jobs but keep them for very short periods. He explained that he was afraid of people. Although he was skilled and efficient at selling, he often took very menial positions. Y had also done some writing for publications. He was quite conscious of his intellectual ability and quick to make known to others that he

was their superior. He explained that his intellect was the only thing he had.

There was a period of several months when he was seen in psychotherapy. Here he made numerous threats of terminating the therapy, derogating the therapist and dwelling on suicide.

Y was diagnosed at various times as schizophrenic, psychopathic, post traumatic personality disorder, depression, hypomanic, etc. The final diagnosis was that of schizophrenia. The psychological material contraindicated this diagnosis. But from a behavioral standpoint, it is striking that each diagnostician presented very cogent arguments for his choice of classification.

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The Rorschach Concept Evaluation Technique[1]

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The purpose of this paper is to describe the Rorschach Concept Evaluation Technique, and to report the results of research involving it. For psychologists wishing to use the technique this paper can serve the needs of an examiner's manual. Sufficient data and instructive material are included herein to make possible straightforward use of the method.

DESCRIPTION OF THE TECHNIQUE

The Rorschach Concept Evaluation Technique[2] (CET) is designed to be used with and auxiliary to the individual Rorschach examination. Only in certain restricted instances, to be referred to later, is it permissible to administer the CET in the absence of the regular Rorschach examination. No conclusive data are available regarding the administration of the CET to groups.

Essentially, the CET involves the presentation to the S (subject) of 50 specified Rorschach blot areas, each paired with a stated concept, and the evaluation by the S of whether the indicated areas could or could not represent the stated concepts. The selection of the concepts is described in detail elsewhere (7). All of them except one were selected—with certain modifications—from Beck's lists (1944) in such a manner that 25 of them are good concepts and 25 are poor concepts.

The S is requested to answer Yes or No to each presentation, and upon the basis of his answers the test is scored. It is then evaluated according to norms. Typically administration of the test requires about ten minutes.

The major methodological difference between the CET and the orthodox Rorschach is that in the latter the S suggests concepts and the examiner evaluates them, whereas in the CET the examiner suggests concepts and asks the S to evaluate them. The procedure may also be viewed as a variation of the True-False technique. It is somewhat similar, also, to the Harrower-Erickson Multiple Choice Technique (5).

The CET is too short a test to be expected to yield comprehensive and conclusive information covering the great expanse of personality. Its purpose, as a technique auxiliary to the Rorschach examination, is to provide supplemental and additional information. In terms of diagnostic utility it is helpful in some instances and not helpful in others. It appears to be most useful in the identification and differentiation of psychosis, and least useful in the identification of neurosis and psychopathy.

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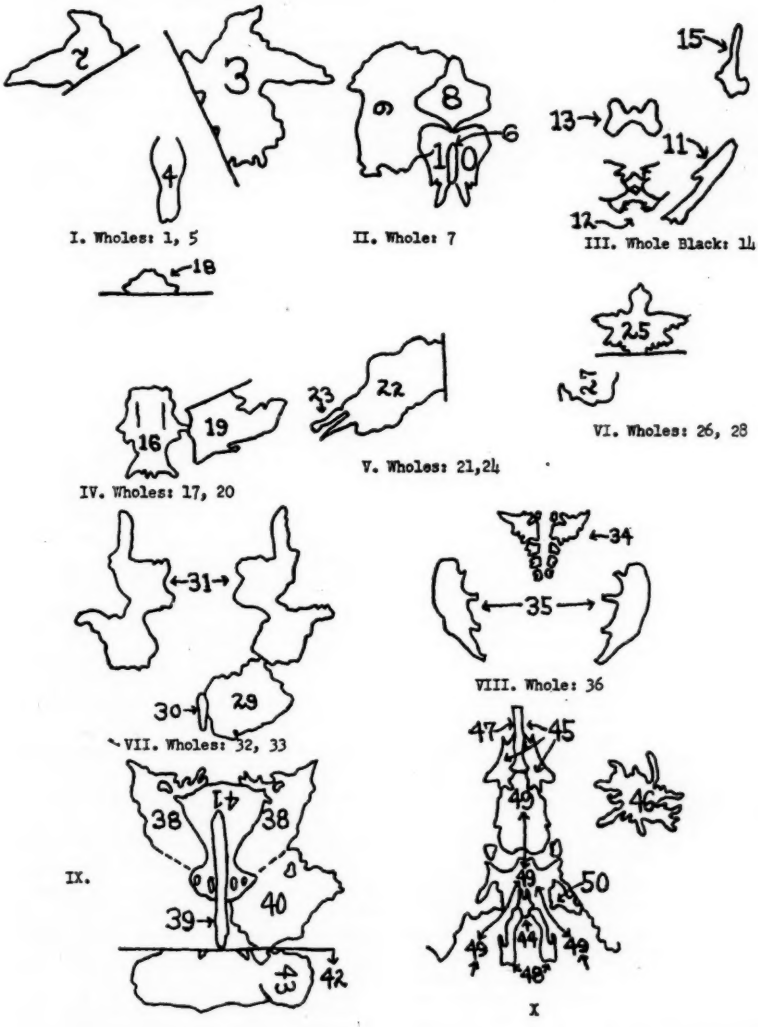
[1] From the Veterans Administration Hospital, Palo Alto, California.

[2] The list of persons whose generous cooperation contributed to making possible the studies upon which this paper is based is too extensive to give here. The author is particularly indebted, however, to the Manager and Staff of the Palo Alto Veterans Administration Hospital, and to the Director and Staff of the Sonoma State Home at Sonoma, California. R. E. Billings contributed greatly in the statistical analysis of the date, and W. R. Grove and Clare Thompson made a number of helpful suggestions concerning the preparation of the manuscript. Francis Orr of Stanford made possible most of the testing of normals.

FIGURE I Location Chart for the Concepts



In terms of personality description the test appears to be most helpful in the evaluation of mood, contact with reality, and rigidity.

On the basis of presently available norms the test is appropriate for use with adult men and women, both normals and abnormals.

Administration

The CET should be administered immediately after the routine Rorschach examination. It is best viewed as a part of the Rorschach examination. Some examiners may wish to substitute the CET for the usual testing-the-limits procedure. If testing-the-limits is undertaken in the usual manner the CET should follow this procedure, not precede it.

In administering the test the examiner presents each Rorschach card to the S, using the words of instruction given on the Sample Test Blank (Figure 2). He indicates for each concept the appropriate blot area by pointing or by marking off the area with a piece of paper These areas are indicated in Figure 1. The examiner presents each card in the proper orientation. ($\wedge$, $>$, $\vee$, or $<$) but does not routinely give the card to the S. The S may take the card if he wishes to examine it more carefully, however. *The examiner must be particularly careful to avoid giving any cues suggesting which concepts should be answered "Yes."* It is to be emphasized that the S should not have to search for the areas implied on the blot: it is the examiner's obligation to make these clear to him. After some practice this can be done easily, either by pointing or by blocking off part of the blot.

The S is encouraged to make his decisions without taking too much time, but he is not pressed. If he vacillates he is encouraged to make a definite decision. The examiner records the response by circling the appropriate letter (Y or N) on the test blank.

In the event it is desired to administer the CET without first giving the Rorschach the examiner should first have the S look at the blots and attempt to find some concept on each card. This should be done even though such concepts as the S may report are not scored, since the standardization of the CET is based upon the performance of Ss who first became familiar with the blots in taking the Rorschach examination.

The examiner should complete the administration of the CET even though the S's responses are all Yes (or No). Records with 50 Yeses or 50 Noes are not rare among psychotics.

If the S does give a record of 50 Yeses, or 50 Noes, it is suggested that the examiner evaluate whether the answers were based upon actual examination of the concepts, or whether they were based upon some set in which the concepts really were not considered at all. One technique which sometimes seems to help in this evaluation (though no formal data are available regarding it) is to give an additional concept for consideration. For example, if the S has answered all Noes, the examiner may ask whether Card 10 could represent blotches of different colored ink. If the S answers No the indication is that his responses were based on a negative set. Or, if the S has given 50 Yeses, the examiner may ask if the upper left blue portion (octopus) of Card 10 could be an orange. If the S answers Yes the indication is that his responses were based on a Yes set, rather than on an examination of the cards. Regardless of how an S answers such additional questions the record may still be useful.

There is no inquiry of the S's decisons. The examiner may, of course, repeat any given concept question in order to obtain a definite decison. Giving a new concept as soon as the S has responded to one will create an atmosphere of

FIGURE 2 Sample Test Blank for Rorschach Concept Evaluation Technique (CET)

by

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DIRECTIONS: (Immediately after inquiry) - "So far as we have gone through the cards you have told me the things that you have seen (and you have done very well). Now we are going through them quickly again, and this time I am going to suggest certain things to you. I want you to tell me if you can see them. That's all there is to it this time. I will say, 'Could this be a ___something or other___' and you look at it, decide and say, 'Yes, it could' or 'No, it couldn't.' Now, some of the things I will suggest to you look like what I say, and some don't--so don't say anything could be what I say unless you really see it; on the other hand, be sure to tell me if you do see it. Don't take too long to study each thing I suggest, but decide as quickly as you can whether it could be what I suggest. All right, here's the first one."

I.	^	1.	Y	N	Could this be a bat?
	v	2.	Y	N	Could this be a fish?
	^	3.	Y	N	Could this be a witch riding on a broom?
	^	4.	Y	N	Could this be a person--or part of a person--standing erect?
	^	5.	Y	N	Could this--the whole thing--be a man standing with his legs apart?
II.	^	6.	Y	N	Now, see this small part right in here--could it be the shape of a woman?
	^	7.	Y	N	Could the whole thing be two people doing something?
	^	8.	Y	N	Could this part right in here be a dancer, like a ballet dancer?
	>	9.	Y	N	Could this--just the black part--be a dog?
	^	10.	Y	N	Now, this red part here--could it be a butterfly?
III.	^	11.	Y	N	Could this be a tree?
	^	12.	Y	N	Could this--this light part--be a face?
	^	13.	Y	N	Could this be a butterfly?
	^	14.	Y	N	Could this--just the black part--be two people lifting something?
	^	15.	Y	N	Could this be a turkey?
IV.	^	16.	Y	N	Could this part be a person standing straight up?
	^	17.	Y	N	Could the whole thing be a man sitting on a stump?
	^	18.	Y	N	Could this be a candle?
	^	19.	Y	N	Could this be a shoe?
	^	20.	Y	N	Could the whole thing be an animal skin?
V.	^	21.	Y	N	Could this--the whole thing--be a bat?
	^	22.	Y	N	Could this be a cat?
	^	23.	Y	N	Could this be part of a person's leg?
	v	24.	Y	N	Could this--the whole thing--be a man bowing, holding out his arms?
VI.	^	25.	Y	N	Could this be a man diving, as in a swan dive?
	>	26.	Y	N	Now this way--the whole thing--could it be a dog's face?
	>	27.	Y	N	See this part here--could it be the profile of the face of a man who is pouting?
	^	28.	Y	N	Could the whole thing be an animal skin?
VII.	^	29.	Y	N	Could this be a child sleeping?
	^	30.	Y	N	Now this part right in here--could it be part of a river?
	^	31.	Y	N	Could this be two women, or parts of two women, who are talking to each other?
	v	32.	Y	N	Could the whole thing be shrubs?
	^	33.	Y	N	Could this--the whole thing--be a frog?
VIII.	^	34.	Y	N	Could this part right in here be ribs?
	^	35.	Y	N	Could these be two people standing up?
	^	36.	Y	N	Could the whole thing be a rainbow?
	>	37.	Y	N	Could this be an animal?
IX.	^	38.	Y	N	Could these be two witches doing something or saying something?
	^	39.	Y	N	Could this part be an alligator?
	^	40.	Y	N	Could this be a frog?
	v	41.	Y	N	Could this be a vase?
	^	42.	Y	N	Could this be a boat?
	<	43.	Y	N	Could this be a man's head?
X.	^	44.	Y	N	Could this be a rabbit's head?
	^	45.	Y	N	Could this be intestines?
	^	46.	Y	N	Could this be a crab or an octopus?
	^	47.	Y	N	Could this be a flashlite?
	^	48.	Y	N	Could this be two women wearing long dresses?
	^	49.	Y	N	Could this white part be a skeleton, or part of a skeleton?
	^	50.	Y	N	Could this be a water pitcher?

FIGURE 3 Sample Scoring Sheet

Rank Order	Item Numbers	Equal Interval Scale		Q
1	37	100		—
2	(14)	82		—
3	(19)	79		—
4	(43)	74		—
5	28	73		—
6	21	73	82	4.4
7	44	71	79	5.0
8	(10)	70	74	5.5
9	(45)	70	70	6.1
10	46	68	70	6.6
11	23	68	62	7.1
12	20	67	437	7.6
13	34	65		8.1
14	(38)	62		8.5
15	30	61		8.9
16	4	61		9.3
17	31	60		9.6
18	13	60		9.9
19	9	58		10.1
20	1	50		10.3
21	47	49		10.4
22	8	49		10.6
23	27	48		10.7
24	7	42		10.7
25	17	41		10.7
26	(5)	39		10.7
27	6	39		10.7
28	48	38		10.7
29	(39)	37	39	10.6
30	32	36	37	10.4
31	25	34	34	10.3
32	(15)	34	17	10.1
33	49	31	16	9.9
34	12	27	162	9.6
35	42	22		9.3
36	15	21		8.9
37	5	20		8.5
38	(24)	19		8.1
39	11	18		7.6
40	(40)	17		7.1
41	(26)	16		6.6
42	29	15		6.1
43	24	13		5.5
44	36	13		5.0
45	16	12		4.4
46	22	9		—
47	26	8		—
48	50	8		—
49	2	5		—
50	35	0		—

SCORING DIRECTIONS: Count the number of Yes answers. Draw a line across the columns to the left just under the number of Yeses as indicated in the Rank Order Column. All items above this line, in the Item Numbers column, should be answered Yes. Circle those answered No and total their values as taken from the Equal Interval column. Do the opposite for all items below the line, i.e., circle those which are answered Yes and sum their values as taken from the Equal Interval column. This is Sum Wrong Yeses. Enter the two values obtained in the appropriate blanks below. This whole procedure can be facilitated by folding the sheet on the dotted line to the left so that item answers are easily seen. The number of circles above the line must equal the number below the line. Subtract Sum Wrong Yeses from Sum Wrong Noes. Divide this difference by the value in the Q column just above the line drawn across the columns. Fill out blanks after Raw Scores below. Refer to T-score conversion tables in Manual for appropriate T-scores. Note that T_R is the T-score for number Rorschach responses.

Sum Wrong Noes 437

Sum Wrong Yeses 162

Difference 275

Diff./Q 26.4

RAW SCORES:

No. Yeses 21

Diff./Q 26.4

No. Resp. 13

V-J -9

T-SCORES:

J 39

V 30

T_R 41

E 44

Patient's Last Name Doe First Name John Middle Name J.

Register No. Institution Ward

Psychologist Date

dispatch which will keep the presentations from dragging along. The examiner may answer any questions such as what may or may not be included in each concept.

The author has prepared a detailed statement of how each concept should be scored (Y or N) when the S insists on certain qualifications along with his answer. Experience has indicated that this statement is rarely needed, however, and it is not included in this paper.

There has been some question, at institutions where the CET has been used, regarding the effect of administration of the CET on later

administrations of the Rorschach proper. The best opinion appears to be that the CET may well affect a Rorschach protocol obtained shortly after the CET but that this effect declines rapidly over time.

SCORING

For experimental purposes the CET has been scored in a variety of ways, but at present only three scores are obtained for clinical use. Two of these (J and V) are independent variables and the third (E) is derived directly from these two. The meaning of these variables will be considered presently.

Directions for scoring the test are summarized on the Sample Scoring Sheet (Figure 3). It may be noted there that a blank is provided for recording the number of responses on the Rorschach. This is because the best interpretation of the CET variables requires the simultaneous use of R.

The scoring of J, E, and R is quite straightforward, but the scoring of V may be a little complicated at first. On the Sample Scoring Sheet the circle around items in the Item Numbers Column represent deviations of the S's answers from complete consistency. The value "Difference Sum Wrong Noes from Sum Wrong Yeses" is actually the sum of the deviations —on the equal interval scale—of the circles from the line drawn across the columns. By dividing by the appropriate value from the Q-column one allows for the fact that the extent to which Ss have the opportunity to make errors is a function of the number of Yeses. It will be noted that one does not score for V when the S has given fewer than 6 or more than 45 Yeses. The reason for this is that in such instances the reliability of V would probably be extremely low.

The T-scores (Table III) are so arranged that V is high when the deviations of errors are minimal, and low when the deviations of errors are great. A high V thus reflects marked consistency, or little variability.

The derivation of the tabular data referred to above will be discussed presently.

MEANING OF THE TEST VARIABLES

For optimal use of the CET it is necessary to make certain inferences regarding the psychological meaning of the test variables. The CET is a short test and its variables are not as reliable as one would like. Consequently one must guard against over-interpreting, against placing too much confidence in the validity of its scores as measures of certain personality variables or traits. The test is best conceived of as furnishing cues and hypotheses regarding the nature of a personality, and these cues should always be considered and evaluated in the light of other test data.

A later section of this paper summarizes most of the experimental data upon which interpretation may be made. The test may be used with greatest confidence when the examiner, in his interpretation, sticks fairly close to those data. It is desirable, however, to have some type of theoretical framework which organizes those data and which suggests interpretations beyond them. Such a framework will be presented below. It is based upon the theoretical point of view which led the author to construct the test and upon experience in clinical use of the test. *It is to be emphasized that the suggestions presented are to be considered as clinical hypotheses, rather than as established facts.* They appear to be reasonable hypotheses, but they

have not yet been tested rigorously by appropriate experimental procedures.

In taking the CET the S is required to compare a blot area with a suggested concept. For each evaluation then, the S is presented with *two* concepts—that implied by the question to him (e.g., bat, man) and that of the blot area. His task is to compare the two concepts and determine whether they are alike (Yes answer) or different (No answer). The procedure may therefore be considered a paired comparison technique. If the S's standards of comparison are strict then he will tend to answer No; whereas if he answers Yes more frequently it is indicated that his standards of evaluation are less strict. The number of concepts reported seen, and thus the J-score, is thus taken to reflect directly the strictness of the S's standards of evaluating the concepts. If it is *assumed* that this is a trait having some generality beyond the concepts used in the CET a number of hypotheses regarding the psychological meaning of J may be made. For example, it may be inferred that J is related to rigidity, looseness and spontaneity in thinking, to criticalness, deliberativeness, and cautiousness. It is further *possible* that the strictness of the standards of evaluation the S uses in judging the concepts reflect the strictness of those standards he sets for others, and — more basically — for himself. J. may therefore have significant implications for the understanding of the S's self-concept. This interesting hypothesis has not yet been tested.

More specifically, the hypotheses for a low J-score would be that this individual tends to maintain, in his thinking, strict standards of evaluation, to have highly channelized thought patterns which would tend to revolve endlessly about a few subjects. He would tend to be ruminative, to take things seriously, to carefully consider all sides in making a decision. A high J-score, on the other hand, might suggest rambling and tangential thought patterns, a tendency not to be ruminative or to take things too seriously.

Both high and low J individuals may appear withdrawn, but in a different way. Theoretically, the high J individual should appear more stuporous, lethargic, and listless, as if nothing is important or significant or matters very much, as if he is withdrawn not only from others but from himself as well, whereas the low J individual should evidence an intense inner life, as if he has withdrawn into himself. For example, deteriorated organics whose behavior appears almost automaton-like will often obtain a high J, while severely depressed and ruminative Ss will often obtain a very low J.

V reflects the consistency with which the S applies his own standards of evaluation (as indicated by J) to the various items, in terms of the item criteria based upon the normal sample. If V is high the indication is that such standards are applied consistently, predictably *(Note that V actually is inversely related to variability),* whereas if V is low the indication is that such standards are used inconsistently, uniquely. That is to say, for a S with low V some perceptual interpretations will be made on the basis of rigorous standards, others on the basis of loose standards—insofar as the 50 items are concerned. If we *assume* that this "trait" has some generality beyond the evaluation of the CET concepts, we may draw the following theoretical interpretations of what V means psycholog-

ically. The variability of standards implied by a low V score *may* indicate a fluctuating, unpredictable set of standards. If this is the case the S's perceptions might tend to mean different things at different times, resulting in less stability to the perceived world and a less secure framework upon which to evaluate perceptions. On the other hand, a normal or high V would indicate that the S's standards of evaluation, be they rigid or loose, were consistent.

The variability indicated by a low V score might, however, reflect not a set of evaluative standards fluctuating independently of the stimuli, but might rather indicate that the S's standards of evaluation are partly a function of the meaning to him of the stimuli. For example, a S might tend to say No when the concept presentation referred to a personality area against which he had a need to defend, and likewise he might tend to say Yes if the concept presentation touched an area representing a need to perceive. Thus for some Ss the stimuli may have unique emotional meanings which help to determine their responses.

Whichever of the above possibilities is the more nearly correct, the implication is that the lower the V-score the more the S tends to perceive the concepts in a unique fashion, i.e., different from normal. If we assume this tendency to be generalized beyond the CET we may hypothesize that V measures contact with reality, or—inversely —distortion of reality (or what is socially accepted as reality).

It appears to be a reasonable hypothesis that V typically reflects the *breadth* more than the *degree* of reality contact. Thus a S who obtains a very low V should, theoretically, distort reality in several areas, while a S who distorts reality in only a narrow circumscribed area (e.g., some paranoid schizophrenics) might obtain a satisfactory V-score. This theoretical inference is based on the fact that in the CET a large number of concepts are presented to the S without regard to the S's unique problem areas. Consequently, it seems likely that a variety of areas may be contacted by associations arising from the blots, but that no single area will be touched consistently.

Ss with low V-scores frequently appear clinically to be deteriorated, or are persons of very low intelligence. Ss whose reality contact is low, as judged clinically, but whose V-score is adequate, will frequently be found to have highly systematized delusions. They may be the type of patient whose distortion of reality would be not too apparent publicly, who are in good contact in most areas.

The interpretation to be given to a high V-score is not clear. Such a score does not appear to be particularly useful in itself in analyzing the test results. Persons obtaining such a score often appear to be rigid and are frequently of above average intelligence, but such inferences cannot be made with much confidence.

Theoretically, V should be closely related in meaning to Rorschach form level. As originally scored V correlated .75 with F+% (7). This coefficient was probably atypically high because of the heterogeneity of the sample, but some relationship would be predicted theoretically. Form level appears to reflect the S's reality contact in terms of his own inner life, whereas V is theoretically considered to reflect his reality contact in terms of stimuli presented to him by others, by "the outside world." Seriously ill schizophrenics would be expected to be low in both form level

and V, but on the assumption that a thinking disorder first encroaches upon inner fantasy life, one might hypothesize that early schizophrenics or schizophrenics in partial remission would more likely be low on form level than on V.

Both J and V may be related theoretically to rigidity, or what Block (2) has termed ego control. This variable has been symbolized E in the CET. It has been hypothesized that the lower J the more rigid the S's patterns of thought. But a rigid person is also predictable and consistent. Consequently one might hypothesize that V also reflects rigidity. This is the rationale for the scoring of E by subtracting J from V. On the basis of available research the variable E remains somewhat tenuous and should be interpreted with extreme caution; it is probably the least valid of the CET variables.

All of the above discussion assumes that the S actually considers each question before giving his answer, and that his answers accurately reflect his general standards for comparison of complex stimuli. Obviously, this assumption may not always be justified. The S's responses will no doubt be determined to some extent by such factors as familiarity with certain concepts, the tendency to answer in a manner which the S believes will please the examiner, and possibly by a perserverative tendency. It is doubtful that suggestibility influences the responses to any great extent, however. Eysenck and Furneaux (4) found that suggestibility—of the type indicated by hypnotizability — was not significantly correlated with the willingness of Ss to accept suggested concepts on inkblots.

The CET As An Aid In Diagnosis

The CET scores are not sufficient in themselves to establish a diagnosis. When used as an adjunct to the Rorschach and other tests, however, they should prove useful in this regard.

If J, V, and T_R (T-score for R) all approach 50 the S—*insofar as this test is concerned*—is normal. It must be noted, however, that no evidence is available to indicate whether these scores vary as a function of psychopathy, mild neurosis, or what is sometimes called simple adult maladjustment. The scores to be expected of most of organic disorder are also unknown.

If J, V, and T_R all approximate normal, but form level is low or very spotty, one may entertain the hypothesis of paranoid schizophrenia.

If J is low an hypothesis of depression, of "withdrawal into the self," is justified. This is particularly true if R is also low. Given low scores in both J and R the diagnostic impression would be depression unless V is also low. If J and R are both very low, and V normal or only slightly low, the hypothesis is psychotic depression: if these signs are less pronounced, neurotic depression. If V is also markedly low the judgment of withdrawal into self remains descriptively true, but the diagnostic indication would be either schizophrenic, of the withdrawn, depressed type, or organic pathology in which the patient is deteriorated, withdrawn, and depressed.

When J is high the possibility of schizophrenia, with characteristic bizarreness and scatteredness of thought should be considered, particularly when V and R are both low. This same pattern may be found in deteriorated organics who manifest similar personality features, or in mental defectives.

When all variables are high the S may well be abnormal statisti-

cally, but clinically he should be in good contact with reality, intelligent, and sufficiently flexible. Experience suggests that a high J is not an adverse sign when V and R are also high.

When J and V are in the normal range and R low the most appropriate hypothesis is neurosis. The rationale here is that when J and V are normal it may be presumed that the S has sufficient intelligence to give a normal number of responses. In such a case a low R can hardly be due to depression or deterioration, but may well be due to marked anxiety. Many normals also obtain this pattern, however, so that much of its diagnostic utility is lost. It may prove helpful, however, in differentiating between neurosis and schizophrenia. There is some tentative evidence that neurotics — as well as paranoid schizophrenics — tend to perform better on the second half of the test (in terms of adequacy of evaluations) than on the first half, whereas normals and non-paranoid schizophrenics appear to do about equally well on the two halves. This hypothesis has not been rigorously tested, however.

In general, the hypotheses of generalized distortion of reality, or of psychotic deterioration, are not justified unless V is markedly low. The hypothesis of psychotic deterioration also requires that R be low. Depression may reasonably be inferred when both J and R are markedly low, but not when only one of them is low.

The Technique is not helpful in differentiating between schizophrenic and organic deterioration. The relation of its variables to prognosis is unknown, and likewise no data are available to indicate whether it can be useful in helping to determine appropriate treatment programs.

DEVELOPMENT OF THE NORMS

The T-scores are based upon administration of the CET to 228 normals. These cases were selected in such a manner as to approximate typical adults tested in hospitals and clinics. The sample included 100 adults described in detail elsewhere (3). The range of socio-economic levels represented was extremely large, and included a minimal number of professional and higher level positions. Table II presents the distribution of years education for the sample and Table I presents the distribution of ages for the sample.

All tests of the normals were administered by persons not familiar with any of the hypotheses entertained by the author. The great majority of tests were administered by advanced students in Rorschach testing at Stanford University.

On the basis of data from the sample of normals the percentages of Yes answers for each item were obtained, and the Equal Interval Scale (See Figure 3) was constructed. The exact method used is described elsewhere (7). On the basis of the data for normals the T-score equivalents (Table III) were obtained.

TABLE I—Age Distributions For The Normal Sample

Years Age	Men	Women	Total
10 - 14	8	4	12
15 - 19	5	2	7
20 - 24	17	19	36
25 - 29	24	21	45
30 - 34	11	11	22
35 - 39	8	11	19
40 - 44	11	13	24
45 - 49	8	10	18
50 - 54	5	8	13
55 - 59	6	7	13
60 - 64	2	3	5
65 - 69	2	6	8
70 - 74	2	1	3
75 - 80	0	1	1
Unknown	1	1	2
N	110	118	228
Mean Age	33.97	37.25	35.69

TABLE II—Years Education Distributions For The Normal Sample

Years Education	Men	Women	Total
1	0	1	1
2	0	0	0
3	1	0	1
4	1	1	2
5	1	2	3
6	0	2	2
7	4	3	7
8	7	13	20
9	4	4	8
10	4	5	9
11	3	4	7
12	49	57	106
13	9	13	22
14	12	7	19
15	4	2	6
16	4	3	7
17	3	0	3
18	1	0	1
Unknown	3	1	4
N	110	118	228
Mean yrs. Educ.	11.87	11.20	11.50

Normative data for all samples are presented in Table IV. Records on abnormals were gathered for the most part at the Palo Alto Veterans Administration Hospital, and include substantially the same cases as described earlier (7), except that a few cases have been added. Further, all cases have been rescored according to the equal interval scale based on 228 normals, whereas the data reported previously were based on records of only 54 normals.

The sample of mental defectives was gathered at the Sonoma State Home, Sonoma, California. Their IQ (Wechsler-Bellevue) range was 50-72, with a mean of 61.52 and a sigma of 5.85. The exact criteria upon which all cases were selected is described elsewhere (7).

EXPERIMENTAL DATA

a) *Comparison of diagnostic groups on J, V, E, and T_R:* Overall comparisons on these variables for the following samples have been reported elsewhere (7). 54 normals, 31 neurotics, 30 paranoid schizophrenics, 32 non-paranoid schizophrenics, 16 psychotic depressives, 26 psychotics with paresis, and 25 mental defectives. For all variables the overall differences were significant at the .01 level or better. In this study raw scores rather than T-scores were used, and the V score was based upon data representing only 54 normals. It does not appear, however, that results from the more refined scoring, as reported in Table IV, make the group differences any less pronounced.

b) *Reliability of the variables:* The reliability of R, as computed by the split-half method, was computed for another study (9). Reliabilities were: for normals, .88; for neurotics, .91; and for schizophrenics, .77. Respective N's were 76, 32, and 50. The cases used in this study were largely drawn from those used in the standardization of the CET.

The reliability of J in present T-score terms has not been computed, but the reliability of No. Yeses, as estimated by the odd-even method and appropriately corrected, was .82 for the 214 cases reported in the original study of the CET (7). For a group of 69 normals obtained later the coefficient was .93.

The reliability of V has not yet been estimated with complete satisfaction. Because of the nature of the variable it is difficult to handle by a split-half method. V is a measure of variability among items, and it is reasonable to expect that it should be correlated with variability between halves. Variability between halves would tend to depress obtained reliability coefficients. Obtained split-half coefficients were: for 50 normals, .52; for 28 neurotics, .62; for 21 non-paranoid schizophrenics, .75; and for all of

TABLE III—T-Score Conversion Table

T	No. Yeses	R	Diff./Q	V—J
86	49			52—53
85	48			51
84				50
83	47			48—49
82				47
81	46			45—46
80	45			44
79				42—43
78	44			41
77				39—40
76	43			38
75	42		0—.9	36—37
74				35
73	41	100—		33—34
72		86—99		32
71	40	70—85	1—1.9	30—31
70		62—69		29
69	39	57—61		28
68	38	52—56	2—2.9	26—27
67		49—51		25
66	37	46—48		23—24
65		43—45		22
64	36	41—42	3—3.9	20—21
63	35	38—40		19
62		36—37		17—18
61	34	34—35	4—4.9	16
60		33		14—15
59	33	32	5—5.9	13
58	32	31		11—12
57		29—30		10
56	31	28	6—6.9	8—9
55		27		7
54	30	26	7—7.9	5—6
53	29	24—25		4
52		23	8—8.9	2—3
51	28	22		1
50		21	9—9.9	0
49	27	20		—1—2—
48	26	19	10—10.9	—3—
47		18	11—11.9	—4—5—
46	25	17		—6—
45		16	12—12.9	—7—8—
44	24		13—13.9	—9—
43		15		—10—11—
42	23	14	14—14.9	—12—
41	22	13		—13—14—
40			15—15.9	—15—
39	21	12	16—16.9	—16—17—
38		11		—18—
37	20		17—17.9	—19—20—
36	19	10	18—18.9	—21—
35		9	19—19.9	—22—23—
34	18		20—21.9	—24—
33		8	22—22.9	—25—26—
32	17		23—24.9	—27—
31	16	7	25—25.9	—28—
30			26—26.9	—29—30
29	15	6	27—28.9	—31—
28			29—29.9	—32—33—
27	14	5	30—30.9	—34—
26	13			—35—36—
25		4	31—31.9	—37—
24	12			—38—39—
23		3		—40—
22	11			—41—42—
21	10		32—32.9	—43—
20		2		—44—45—
19	9			—46—
18				—47—48—
17	8	1		—49—
16				—50—51—
15	7			—52—
14	6			—53—54—
13				—55—
12	5			—56—57—
11				—58—
10	4			—59—60—
9	3			—61—
8				—62—
7	2			—63—64—
6				—65—
5	1			—66—67—
4				—68—
3				—69—70—
2				—71—

NOTE: It is suggested that when Diff./Q is between 33 and 39.9 V be entered as 10, and that when Diff./Q is greater than 40 V be entered as 5. These conversion values are purely arbitrary, and are suggested in order to provide standardization of recording.

these together, plus 44 miscellaneous psychotics, .70. All of these coefficients have been corrected for a test of doubled length. The differing values are probably largely a function of the differing degrees of sample heterogeneity. Twenty-seven cases were available who had been administered the CET twice. All of the second testings were for

TABLE IV—Normative Data (T Scores) For Different Diagnostic Groups On J, V, T_R, and E

Diagnostic Group	J			V			T			E		
	N	M	σ	N	M	σ	N	M	σ	N	M	σ
Normals	228	50	10	227	50	10	228	50	10	227	50	10
Schizophrenics	34	48.21	21.95	28	37.50	13.27	31	43.82	9.72	28	48.50	14.94
Paranoid Schizophrenics	31	42.72	19.15	28	45.61	9.03	31	45.84	12.30	28	49.78	11.48
Depressives	19	27.10	15.20	14	43.21	10.08	19	34.90	12.96	14	55.79	9.75
Neurotics	34	46.65	9.88	34	50.82	7.61	34	44.06	7.88	34	53.18	8.10
Paretics	27	59.44	25.98	18	34.72	11.64	27	37.67	7.09	18	36.83	15.16
Mental Defectives	25	54.52	17.67	21	31.79	10.53	25	37.16	7.25	24	38.38	12.44

routine clinical reasons so that the procedure cannot be defined as an ideally designed experiment. Intervals between testings ranged from two weeks to twenty months. The coefficient of correlation for V for the two testings was .82. These data are presented here not as definite but as all that is presently available.

c) *Comparison of men and women:* The percentage of Yes answers to each item were computed separately for normal men and normal women, in order to determine if separate norms would be required for men and women. Further, it seemed possible that a masculinity-femininity scale could be constructed if men and women tended to answer in characteristically different ways on certain of the items. However, there were no differences which could not reasonably be attributed to chance variables.

d) *Use of color:* Of the 50 concepts, 46 per cent are from the chromatic cards. It was considered possible that the different diagnostic groups might tend to respond differentially to the colored cards. This, however, was not the case for the groups compared. The per cent of Yes responses to concepts on chromatic cards was, for normals, 45; for neurotics, 46; for non-paranoid schizophrenics, 46; and for psychotic depressives, 45.

e) *Comparison of "overcontrollers" "average controllers" and "undercontrollers:"* Jack Block, (2), as a part of his study of ego control, administered the CET to 22 college students selected as manifesting average ego control, 18 described as undercontrollers, and 27 described as overcontrollers (rigid). These have been scored on E. The hypothesis was that they should differ on E, which purports to measure rigidity. The obtained means

and sigmas were as follows: for the UC group, M=45.39,σ=8.44; AC group, M=48.86,σ=9.85, and OC group, M=53.41,σ=9.18. While all differences are in the predicted direction, and the difference in the AC and UC groups is significant at the one per cent level, yet the groups are not sufficiently well differentiated by E to justify much confidence in the use of E in individual personality description.

f) *Relation of CET variables to intelligence:* From the abnormals on whom Wechsler-Bellevue IQ's were available, 65 records were randomly chosen, and the following correlations with IQ were obtained: for T_R, .24; for V, .44; and for D_J (deviation of J from 50 regardless of direction), −.39. The mean IQ of the group was 101.30, and the σ was 17.12. The variables were intercorrelated as follows: T_R −V, .17; D_J −V, −.14; and D_J −T_R, −.08. On the basis of the appropriate regression equation it was found that the three variables, T_R, V, and D_J, combined to correlate .57 with IQ. A check sample was now selected, numbering 50 cases. The correlation between IQ and the best combination of T_R, V, and D_J now dropped to .41. A weighting system for errors was rationally devised, which correlated .66 with IQ on the 65 case sample. This has not been developed further however, since the relation was not great enough to justify use of the test in measuring intelligence.

g) *Intercorrelations of pertinent variables:* Intercorrelations of D_J, V, and T_R are reported above. From the original study with the CET number of Yeses was correlated .08 with R, −.26 with Rorschach F+%, and .00 with V (V computed on basis of answers of 54 normals then available); and V correlated .75 with +% and .14 with R. Nancy Robinson (8), reported that V correlated −.39 with the Bender-Gestalt (Pascal-Suttel scoring) for 46 cases. On the basis of scattergrams it is indicated that neither V nor J are significantly related to any of the variables on the Zaslow Test (10). Likewise, scattergrams failed to suggest any significant relationships between J, V, or E and any of the following Rorschach variables: F, M, FC, ΣC, W, and D.

SUMMARY

The Rorschach Concept Evaluation Technique has been described. It is a method in which the S is asked to evaluate 50 Rorschach concepts, and is scored according to standard procedures. Norms, based upon 228 normal Ss, are presented. The Technique appears to be useful as an auxiliary Rorschach tool. Authority is granted for psychologists to mimeograph, *for their own use,* the CET Test Form and Scoring Sheet. This article may properly serve as a test manual.

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The Determination of the Relative Strength of Masculine-Feminine Drives by Means of the Szondi Procedure[1]

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A. *The Dialectic Methods*

The Dur-Moll or Masculine-Feminine method of analysis will encompass the relative psychosexual drive strength (Triebproportion), that is, the relationship between the masculine and feminine tendencies.

By the use of this method an isolated aspect of the individual's drive structure will be brought under the magnifying glass. This particular component of the drive structure has momentous import in the sexual disorders (Trieberkrankungen) of inversion, perversion, and metatropismus (reversed sex role, for example, a male pursuing feminine activities and having passive effeminate desires).

The method is called dialectic because the relationship of two polar extremes is traced and elaborated. However before we enter into a discussion of this polarity of drives within the drive economy, as determined through the empirical diagnosis of drive strength (that is, by the Szondi procedure), it is necessary, to clarify what Szondi meant by the terms *Dur-Tendenz* (masculine strivings) and *Moll-Tendenz* (feminine strivings).

The fundamental factors of this drive structure theory, as is well known, has already been set forth, (1). As there presented one sees Szondi's drive system portrayed as follows[3]:

S		P		Sch		C	
h	s	e	hy	k	p	d	m
+	+	+	+	+	+	+	+
−	−	−	−	−	−	−	−

Every need (Beduerfnis) e.g. "h" arises from two tendencies or strivings, (for example, under "h", a feminine need to be the recipient of passive love and affection, (h+), and the polar opposite of being chivalrous, of shunning passive love and affection, of interesting him-

[1] Translated by Marvin W. Webb, Ed.D.

[2] Dr. Moser, a practicing analyst in Zurich, Switzerland, is one of Dr. Szondi's most trusted co-workers. He is secretary of the *Kommission fuer Szondi-Triebdiagnostik und Schicksalspsychologie der S.G.P.A. (Schweizerische Gesellschaft für Psychologie und ihre Anwendungen)* (Swiss association of Applied Psychology), which is the accrediting agency for Szondi workers on the Continent. He is an accredited lecturer in the Szondi Technique and is well known in Europe through his seminars. By virtue of an acquaintance acquired through two seminars and many professional visitations, this translator was entrusted with the task of translating this yet unpublished Mss. into the English. A resume of this work has already been translated into the French.

[3] Translator's note: A hierarchy is here represented as follows: Trieb (drive—4 vectors) → Bedürfnisse (need—8 factors) → Strebung (tendency—16 elements) For example:

Trieb "S" (drive)
- Bedürfnisse (need)
  1. Femininity (h)
  2. Masculinity (s)
- Tendenz (striving)
  1. Personal, mundane (+) tenderness

self in the abstract love of humanitarian projects, of humanity in general, (h—) etc.)[4] Each drive is therefore ambivalent, has an ambitendency. Thus every drive need (h, s, e, etc.) builds itself around a duality. There are accordingly in adults four fundamental drives, (S, P, Sch, C) (1, p.16).

Within these four basic drives we further differentiate two principal groups: the so-called: (1) border drives (Randtriebe — S and C), or elementary drives, and (2) Central drives (Mitteltriebe— P and Sch vectors), the secondary drives or defense mechanism. To the border drives belong the sexual and contact elements. The ego structure (Sch) and the paroxysmal or affect component (P) comprise the defense mechanism.

The human drive constellation in a given individual is determined through the specific developmental form of this antithetical or bi-polar drive structure. The hereditary pattern thereof is from individual to individual readily differentiated; for in the moment of amphimixis the hereditary tendencies or traits and the bi-polar drive needs are imbued with varying degrees of potency. In addition thereto, hormonal fluctuations, environmental influences, and the efficacy of the ego itself, are coupled with, and within certain limits exert an influence on, the individual's role in life.

When one is examined by means of the Szondi procedure, the purpose is to determine the status or degree of participation in the personality structure of these primordial, antithetical tendencies. *Development of the individual signifies the participation in and the modification of these bi-polar factors. The "drive illnesses" (Trieberkrankungen) portray anomalous participatory functioning of these antithetical or bi-polar tendencies.*

In the formal profile of the Szondi procedure, secured in regular manner *(Komplimentmethode)*, those drive tendencies which stand in the foreground, and are therefore at a near-conscious level, are clearly portrayed and their actual structure projected. Those tendencies represented by the photographs not chosen remain in the background and seek an indirect method of expression, as, for example, in love object choice, friendships, illness symptoms, and in other ways.

Dialectically considered, this contemplates an inquiry into the innate nature of both the basic needs (Beduerfnisse) and tendency (Tendenzen) factors, and a determination of the nature of these bi-polar elements, Szondi's new work, (2), introduces and elaborates the dialectic development inherent in this interpretative technique.

The manifold factors of this drive system appear to be particularly definitive, yes, even ostensibly rigid. Nevertheless, there stems from its versatility the possibility of differentiating the most diverse bi-polar tendencies. One of these aspects is the relative strength of the psychosexual drive (Triebproportion).

B. *The Bisexual Structure of the Drives*

We shall now attempt to determine in this drive system, on the one hand, the masculine component and, on the other, the feminine. Szondi has cautiously designated these components the *Dur* (hard), and the *Moll* (soft) tendencies because he has established, not only in the area of sexuality, but in the aggregate areas of his system, masculine and feminine traits. The separation into *Dur* and *Moll* tenden-

[4] Parenthetical statement is translator's. (1) Ibid.

cies, as a matter of fact, transcends the realm of sexual behavior. It is a primitive bi-polarity which is analogous to the antithetical concepts of the *animus* and the *anima* found in the Jungian system of psychology. Bisexuality as a characteristic of human existence has already been substantiated through a series of biological facts:

1. Masculine hormones are found in both men and women.

2. Every embryo has the anatomical arrangement common to both sexes, for example at the same time possessing the Wolfian and Mueller's ducts.

3. Both sexes have a series of rudimentary characteristics of the opposite sex. In extreme deviants this produces the genital and somatic hermaphrodites.

4. According to the cytological theories, e.g. Hartmann, every living cell contains a material (feminine) and a locomotor (masculine) substance.

5. Finally must be recalled the combinatory function of the sex determining chromosomes, the gene formula being:
MMF (men), MMFF (women).

A marked unity and clarity prevails in relation to the biological and physiological foundations of bi-sexuality. One cannot, however, say the same for the psychological and psychopathological aspects.

If one is disposed in the explanation of psychopathological phenomena, as, for example, homosexuality or certain perversions, to assign as a cause an overly-strong bisexual endowment, then it readily appears that one must more explicitly analyze the relative strength of the two components of the psychosexual drive. This is necessary in order to be able to understand the manifold and variegated effects of an unduly potent bisexual tendency, as, for instance, a man oriented too far toward the feminine end of the psychosexual continuum, or *vice versa*.

In the bi-polarity of masculinity-femininity one arranges the data, in accord with psychoanalytic theory, as follows:

1. The antithetics *active-passive* (S vector): This bi-polarity is pregenital and characterizes the basic behavior in the relationship of the individual to the outer world, which in accord with the libidinal developmental stage, emphasizes the oral or the anal stage.

2. Upon this dualism develops the true genital bi-polarity, which in its structure is really very complicated. The masculine behavior is characterized by the erection as as well as through the wish to penetrate the genitals of the sexual partner (or the equivalent of the genitalia) with the masculine sex organ. The feminine behavior, on the other hand, constitutes the wish to permit the reception of an alien body part into her own body.

3. There is a masculine and feminine ego structure (Sch vector). That ego-ideal (as I would want to be) shows a definite fused relationship of the *Dur* and the *Moll*. The extreme development of this structure leads to an inverted identification, that is, to a feminine ego in the man and to a masculine ego in the woman. This phenomenon of an ego-ideal inversion, however, still does not necessarily portray an inversion of the object-ideal (C vector). A man with a feminine ego-ideal, for example, can continually have a feminine object-ideal. This aspect (ego-ideal) is to the greatest extent subjected to societal modification. Masculinity and femininity are concepts which are greatly dependent on the attitudes of the particular society. This so-

cietal influence at the same time develops an over-lay on this psychological (Sch) aspect.

4. The bi-polarity of the object-seeking (the seeking of a sexual object of the opposite or the same sex.) This classification of the bi-sexual aspect demonstrates that it cannot simply be reduced to the categorization *masculine* and *feminine*. Notwithstanding, the *Dur-Moll* method attempts above all to determine the basic relative proportions of the psychosexual component. Evaluations of extreme deviants already permit certain conclusions and demonstrate possible sexual abnormalities or disturbances, which can further be verified through the usual interpretative techniques.

The determination of the basic relative strength of the masculine-feminine elements of the psychosexual component must unconditionally be complimented by a detailed analysis of this particular aspect of bi-sexuality. The *Experimentelle Triebdiagnostik* (1) provides us with a ready method for accomplishing this goal.

C. *The Psychosexual Triebproportion*

Szondi (2, p.184) presents the following scale of the *Dur* and *Moll* tendencies.

Dur tendencies are:

h– Abnegation by the individual of the desire for passive love and affection (Zärtlichkeitsansprüche)

s+ Activity, aggression

e– Damming up of affect, rage, hate, revenge, moral sadism

hy+ Need to exhibit, show himself through his behavior

k+ or± Active introjection, power over the world, incorporating love object (or equivalent of love object) into the Ego, urge for possession.

PO Ego stress

d+ An urge to seek worldly objects (usually material)

m– An urge to separate oneself from the primary love object.

Moll tendencies are:

h+ Urge for an exchange of love and tenderness.

s– Urge toward passivity, to surrender, masochism.

e+ Urge to do good, moral masochism.

hy– Urge or wish to hide oneself, to withdraw, to be reserved.

p+ or± Passive identification, fusing, amalgamation of self with another ego, ego surrender, resignation.

kO Tendency to lean on another

m+ Tendency to cling, security needs

d– Remaining steadfast to old love object.

It would be completely wrong to assume that the woman possesses no masculine (*Dur*) tendencies and the man no feminine (*Moll*) tendencies. *Behind the matrix of the particular sex one invariably finds the tendencies inherent in both sexual groups.* Only the relative proportions of these two components are on the whole different in men and women in their representation. An individual's proportional psychosexual drive strength in either the masculine or feminine component is determined according to whether the *Dur* or the *Moll* tendency exerts the stronger pressure to bring itself into the foreground (Vordergrund) as determined by the Szondi protocol.

There can be established by means of the Szondi procedure, however, only the dialectics (manifest category) of this bi-polarity and not the sexual matrix itself.

The theoretically pure feminine drive profile would be:

h	s	e	hy	k	p	d	m
+	–	+	–	O	+ ±	–	+

The theoretically pure masculine drive profile would be:

h	s	e	hy	k	p	d	m
—	+	−	+	+	±	+	—

If, however, one found such a theoretical profile in an individual, he would be dealing with a disordered and abnormally composed, extreme deviant. The design for the normal or the sublimated individual shows an amalgamating or fusing of these two extreme profiles. If a man completely repudiated or avoided the feminine tendencies within him, or a woman her masculine tendencies, then there would be a clear indication of a severe disorder. The manner in which one resolves this *Dur-Moll* bi-polarity is decisive in relation to his sexual destiny.

The psychosexual drive proportion M : F *(Dur:Moll)* is determined on the basis of the aggregate *Dur* and *Moll* reactions in a series of ten profiles. The quotient of these sums D/M yields the *actual* psychosexual drive proportion. That word *actual* is emphasized because the proportion is in fact established through heredity. This is true regardless of how great a lability or variability is manifested in the milieu. These factors relative to the variability of the proportion obtaining in a given case are noteworthy:

First: The drive proportion is changed by an alteration of the inner secretions. The method, therefore, in the case of old as well as young examinees can only be applied if at sometime in the future the normative value for the particular developmental stage is known.

Secondly: This drive proportion depends on the strength of the ego-censor. The super-ego, for example, determines without conscious participation the extent to which a man is permitted to experience or portray feminine traits and tendencies.

Thirdly: The *Dur-Moll* proportion of the sex partners obtaining at a given time manifests itself through their respective behavior.

These three influences are experimentally authenticated. In the case of normal testees the relationship is approximately[5]:

In Men: *Dur-Moll* 2-3 : 1
In Women: " 1 : 2-3
For example[6]: (See Case I)

As the Dur/Moll quotient approaches 1, then it speaks for a bisexual drive structure, therefore portrays the wish to realize the traits of both sexes. (Cases II and III)

A one-sided shifting of the drive proportion is found in the inversions, for example: (See Case IV)

The urge is present to realize or act out only the feminine tendencies in the drive structure of all the vectors save only the contact

CASE I 33 year old Housewife: (Normal Sex Life)

	S		P		Sch		C		
	h	s	e	hy	k	p	d	m	Total
Dur	0	4	6	0	0	1	1	0	12
Moll	10	2	0	7	1	9	0	4	33
	4		6		1		1		
	12		7		10		4		
	♀		♂♀		♀		♀		

[5] A comprehensive norm statistic is still lacking.

[6] The examples are taken from the archives *für Experimentelle Triebdiagnostik und Schicksalspsychologie, Zurich.*

CASE II—A Male Transvestite: (35 years old)

	S		P		Sch		C		
	h	s	e	hy	k	p	d	m	
	+!	+	−	0	−	±	+	0	
	+!!!	±	±	−	0	−	0	−	
	+!!!	±	−	0	0	±	0	−	
	+!!!	±	−	−	−	+	0	0	
	+!!!	+	−	−	0	0	0	0	
	+!!!	−	−	+	−	−	0	0	Total
Dur	0	0	5	1	0	1	1	2	10
Moll	6	1	0	3	3	3	0	0	16
	0/7		6/3		1/6		3/0		
	♀		♂		♀		♀		

CASE III—A Bisexual Female Journalist: (40 years old)

	S		P		Sch		C		
	h	s	e	hy	k	p	d	m	Total
Dur	9	3	0	1	1	1	4	0	19
Moll	0	1	8	5	6	6	1	10	37
	12/1		1/13		2/12		4/11		
	♂		♀		♀		♀		

CASE IV—A Passive Homosexual Tailor[7] (Age 35)

	S		P		Sch		C		
	h	s	e	hy	k	p	d	m	Total
Dur	0	0	0	0	0	0	10	0	10
Moll	8	8	2	10	3	4	0	6	41
	0/10		0/12		0/7		10/6		
	♀		♀		♀		♂♀		

CASE V—Masochistic Perversion in a 49 year old Man[8]

	S		P		Sch		C		
	h	s	e	hy	k	p	d	m	Total
Dur	1	0	0	3	1	2	10	1	18
Moll	1	10	1	0	7	5	0	8	32
	1/11		3/1		3/12		11/8		
	♀		♂		♀		♂♀		

vector. Only in this latter vector is there evidence of a breaking through of the masculine tendencies. The cause of the passive homosexuality as a mechanism of adjustment in the case of this man would accordingly be the urge to realize or experience only the feminine drive tendencies, while at the same time suppressing the masculine tendencies. (Case V)

The feminine tendencies are al-

[7] Szondi (2)
[8] Ibid.

most twice as strong as the masculine.

Resume:

A. *Bisexuality* can definitely be concluded, if:
1. The Dur/Moll proportion is almost equal (ca. 1 : 1)
2. in factor "h" any sort of excessive tension is revealed (h+!!!, h—!!!, h±)

B. When we speak of *inversion*, we have reference to a strong shift in the direction of the psychosexual tendencies toward the *opposite* sex. This is found in *masochistic* or *passive-homosexual* men, and in *sadistic* or *active-homosexual* women.

C. If there occurs a displacement of these psychosexual tendencies in the direction of the *same* sex (as the patient), consequently, in the case of men, a preponderance of the *Dur* tendencies, or in women an overweighting of the *Moll* tendencies, then the following illness pattern is manifested:

In men: Over-emphasized masculine behavior (masculine narcissism), sadistic perversion, active-homosexuality; sexual heedlessness (Satyriasis).

In women: Over-emphasized delicate feminity, masochistic perversion, sexual heedlessness (nymphomania)[9].

D. *The Differential Determination of the Psychosexual Drive Proportion.*

The aggregate *Dur-Moll* proportion gives an actual cross-dimensional portrayal of the relationship of the masculine to the feminine drive strivings or tendencies. A definitive declaration is permitted, however, only where the values are extreme.

It is possible by means of the Szondi procedure to rather accurately determine the preliminary differentiating aspects of bisexuality by virtue of these rules:

1. The polar opposites active-passive of the pre-genital constitution are represented respectively in the tendencies s+ and s—.

2. The so-called masculine wish to penetrate the body of the partner with a body part (penis or its equivalent) together with the erection desire of the male manifests itself first in the genital phase of libidinal development. In the Szondi procedure this is revealed through the tendencies "h—", "s+". Out of this desire or urge emanates a whole group of masculine behavioral characteristics, such as aggressive seizing, or attack, a drive for domination, for power, physical activity, deployment of physical strength, etc. This sexual "core" syndrome of the male is further complimented by a series of accessory traits, for example:

hy+ Development and demonstration of masculine potency

d+ Active search for a sexual object

m— Dissolution of the bond to the primitive love object, urge to escape from the primitive love object.

p+ Desire for possession of an object and incorporation of it as an ego-ideal.

The corresponding oppositional tendencies, namely the feminine wish to permit the penetration of the body part of the partner, to passively submit, are evinced in the components "h+", "s—". Likewise the feminine sexual behavior pattern can syndromatically be extended:

hy— Reserved, modest withdrawal, repression of affective behavior

[9] c.f. in this connection: Berling, L. : *Beitrag zur Psychologie der Haltlosigkeit, Diplomarbeit. Institut fuer Angewandte Psychologie, Zürich,* 1950. (A contribution to the Psychology of Heedlessness. Diplomate thesis. Institute for Applied Psychology.)

d– Persistent retention of a love object
m+ Persistence and inflexibility in the securing of a love-object or partner
p+ Adherence to the partner, clinging tendencies, a desire to fuse self with the partner.

Thus, the core of genital feminity is h+, s–, *of genital masculinity is* h–, s+. The accessory tendencies extend and broaden this rather narrow concept of genitality.

3. The masculine ego is seen in the Szondi procedure in the reaction k+ (±), pO, the feminine ego in kO, p+, (±). "Masculine" and "feminine" portray here the structure of the ego-ideal. For example, if a youth has incorporated his mother as the ego-ideal, then his ego (Sch) will be feminine. His identification is inverted. Normally he should have a *masculine* ego-ideal. The *object*-ideal, on the contrary, should develop from the feminine tendencies or components.

4. The question of whether a sexual partner of the same or the opposite sex will be sought is difficult to decide. From the *Dur-Moll* proportion of the Contact vestor (C), this cannot be disclosed. In order for an object choice of the same sex to occur, all *three* of the hitherto mentioned inversion aspects must appear. In the interest of simplicity, we will illustrate the process in the male. The conditions for an object choice of the same sex are:

a. Inversion in the sexual vector (S+ , –)

b. Similarly inversion in the ego-ideal development (feminine ego, Sch O,±). If these two reactions are not synonymous, then there exists between the *Dur-Moll* proportion of the sexual vector and the ego vector a significant discrepancy and homosexuality, can, therefore, be excluded. If they are synonymous, then there is such a strong striving to bring the traits of the opposite sex to expression within himself that a complete inversion of sexual behavior intrudes. This leads first, however, to a masochistic, "passiophilic" (love of mental anguish), metatropistic[10] behavior, which in the majority of cases can be expressed within the framework of a relationship to a member of the opposite sex. This occurs, for example, through the degradation or humiliation of the man, or the enhancement or elevation of the woman. The chief trait of metatropistic *men* is the striving, the urge, for degradation, abasement, or humility. They choose for themselves as a matter of real preference strong women, the heroine and Amazonian types, women who have no breasts. The passiophiles also choose crippled women. Sorrow and suffering fascinates these "metatropistic" men. This preference for sorrow and misery is not, however, to be ascribed to sadism, but to a passive identification with the suffering partner. The "passiophilic" men are not tormentors, but rather the fascinated observers of persecution. Interesting also is the preference for women who are preeminent in an occupation, or who possess a title (servility). Metatropistic *women* want to be heads of households, queens of their realm, equestriennes, drill mistresses and meanwhile to exploit and enjoy the man while he occupies a position of degradation, that is, use him somewhat like a trusty mount.

[10] *Metatropismus* is a reversed sexual goal lying outside the genital area, for example, in the case of the male, effeminate occupations, hobbies, tastes, etc. (In its significance it may be considered as a species of sublimation.)
Szondi, L. *Schicksalsanalyse*, p.415, Bern: Hans Huber, 1948.

It is noteworthy that these women become homosexual with greater facility than metatropistic men. *In order to sublimate* (metatropisieren) *the striving for the advent of a love object of the same sex, a bisexual Dur-Moll proportion must be present in the contact vector* (e.g. a constantly occurring C++)

The step from metatropism to homosexuality is, accordingly, very short. Nevertheless, it will very seldom be consummated. There are an extraordinarily large number of metatropistic individuals of even severe degree, but significantly fewer manifest homosexuals. Why is this so? To be sure, mankind has an effective socio-ethical conscience or ideal, probably also an instinctive shrinking from or fear of choosing a sexual object of the same sex. If it does, indeed, come to a homosexual relationship, then in a majority of cases it is an unstable relationship, which is unsatisfactory to the parties concerned. Homosexuals are on this account untrue in their relationships. In relation to the evaluation of the Szondi procedure, this means that: *Manifest homosexuality cannot with certainty be revealed. Likewise, the differentiation between metatropism and homosexuality rests on an insecure footing.*

5. Szondi brings in, along with the four aspects above mentioned, a fifth in relation to the psychosexual drive proportion, namely, the moral behavior. He differentiates two forms of moral behavior, which in the former interpretative method are known under the names of "Abel" (P+, —), and "Cain" (P—, +)[11]. The "Cain" form is the expression of a virile, combative, recalcitrant nature. The "Abel" constellation, on the contrary, points to a patient, tolerant, expiative behavior pattern. If one envisions these constellations as differential reactions of the Unconscious with respect to guilt feelings, then P—, + signifies moral sadism (reactive aggression), P +, — moral masochism (reactive passivity). In other words, the moral reaction as well as the structure of the individual's pattern of ethics is concordant in its development with the psychosexual drive proportion.

In relation to the problem of differential diagnosis, it is of the greatest interest to pursue the *Dur-Moll* proportion through its multifarious aspects and drive areas. It would be worthwhile, moreover, in every detailed individual profile analysis, alongside the calculation of the psychosexual basic proportion, to determine the following aspects:

1. The pre-genital behavior pattern: active-passive
2. The genital psychosexuality
3. The nature of the ego development
4. The question of whether a sexual partner of the same or the opposite sex is sought, and
5. How the ethical behavior pattern in relation to the antithetics or bi-polarites Masculine-Feminine is constituted.

The portrayal of these manifold possibilities of combination and variation would at this point lead us too far afield. The research relating to the differentiated proportions obtaining in the various sexual disorders has only recently begun.

A great disadvantage, unfortunately, lies in the dependence of the psychosexual drive proportion

[11] The names Abel und Cain stem from the well known Biblical story of fratricide. C.f. Szondi, L. *Experimentelle Triebdiagnostik, passim.*

on the given milieu, which, it must again be emphasized, determines the *actual* relationships. The following casuistics examine only two aspects, namely, *the relationship of ego development to genital sexuality;* in the terminology of the *Experimentelle Triebdiagnostik,* the relationship of the ego vector (Sch) to the sexual vector (S).

E. *Casuistry*

He could even bring his mistresses in the home and, on the whole, they received the approbation of his wife. Here a latent homosexuality seems to be revealed. On the one hand it is observable through the friendship with the mistresses of the husband, and, on the other hand, through the complete avoidance of heterosexual relationships. This example significantly demonstrates that manifest homosexuality

CASE VI A 40 year old Housewife

	S		P		Sch		C		
	h	s	e	hy	k	p	d	m	
I	±	−!!	0	+	+	−	0	+	
II	+	−!	0	+	0	−	+	±	
III	±	±	+	+	0	−	0	±	
IV	±	−!	0	+	0	−	+	+	
V	0	−!	+	+	0	−	+	+	
VI	−	+!	0	+	0	−	+	+	
VII	0	−	+	0	−	−	+	+!	
VIII	0	−	+	±	0	−	+!	+	
XI	0	−	+	±	0	−	+	+	
X	0	−	+	+	0	−!	+	+	Total
Dur	1	0	0	7	1	0	8	0	17
Moll	1	8	6	0	8	0	0	8	31
	1/9 ♀		7/6 ♂♀		1/8 ♀		8/8 ♂♀		

The psychosexual drive proportion shows a preponderance of the *Moll* tendencies, sexual vector and ego vector are synonymous (both feminine). The contact drive is as much masculine as feminine. This combination is found in masochistic women. The bisexual structure of the Contact vector demonstrates, moreover, a predisposition or tendency toward a homosexual object choice.

This woman has been married for 15 years and has a child. She has refused, however, for the past ten years to have sex relations. "Sexuality is of no interest to me." Her husband was permitted to go to bed with whomsoever he wished.

cannot unconditionally and definitively be concluded from the portrayal of a homosexual syndrome in the Szondi profile. (See Case VII)

In the psychosexual drive proportion the *Moll* tendencies are approximately eight times stronger than the *Dur* tendencies. The Sexual and Ego vectors are both feministic, likewise the Contact vector. The bisexual conformance, however, is lacking in the Contact vector. There is presented, therefore, a masochistic sexual disorder and not homosexuality. This woman was successively stage dancer, fashion model, barmaid, beautician (all occupations which have an affinity with bisexuality). She was

CASE VII 25 year old Woman

	S		P		Sch		C		
	h	s	e	hy	k	p	d	m	
I	±	+	0	−	0	+	−	+	
II	0	−	+	−	−	0	+	±	
III	±	−	+	−	0	+	−	+	
VI	−	−	+	−	−	+	−	+	
V	±	−	+	−	0	+	−	+	
VI	−	0	±	−	+	0	±	+	
VII	+	−	+	−	−	+	0	+	
VIII	−	−	+	−	0	−	0	+	
IX	+	−	+	−	−	±	0	+	
X	+	−	+	−	−	+	0	+	Total
Dur	3	0	0	0	1	2	1	0	7
Moll	3	8	8	10	4	7	4	9	53
	3		0		3		1		
	11		18		11		13		
	♀		♀		♀		♀		

CASE VIII An Active Homosexual Man (Age 30)

		S		P		Sch		C		
		h	s	e	hy	k	p	d	m	
Normal	I	+	+	−	±	0	+	−	0	
Profile	II	0	+	0	±	+	+	−!	−	
	III	0	+	0	±	+	+	−!	0	
	IV	+	+	0	+	+	−	−!	0	
	V	−	+	0	+	+	+	−!	0	Total
Dur		1	5	1	3	4	0	0	1	15
Moll		2	0	0	0	1	4	5	0	12
		6		3		4		1		
		2		0		5		5		
		♂		♂		♂♀		♀		

		S		P		Sch		C		
		h	s	e	hy	k	p	d	m	
Empirical	I	+	±	0	0	+	ϕ	−	−	
Complimentary	II	±	+	−	0	−	+	ϕ	−	
Profile	III	±	+	−	−	−	−	+	−!	
	IV	−	+	−!	−	+	+	ϕ	−	
	V	±	+	−!	−	+	+	ϕ	±	Total
Dur		1	4	4	0	3	1	0	4	17
Moll		1	0	0	2	0	3	1	0	7
		5		4		4		4		
		1		2		3		1		
		♂		♂		♂♀		♂		

described as a sexually promiscuous psychopath and tippler. Her sexual relationships are strongly masochistic.

Synonymity of the "S" and "Sch" vectors speaks for *metatropismus,* possibly even for homosexuality. In the case of *active homosexual wom-*

en one finds the following drive proportion:

S	Sch	C
♂	♂	♂ ♀

Passive homosexual women give the same syndrome as passive homosexual men:

S	Sch	C
♀	♀	♂ ♀

In the case of *active homosexual men* the syndrome is far more complicated: The driving force or urge is not the wish to bring to fruition the feminine tendencies, but to live out anal sadism with a love object of the same sex. Consequently, we find in this group an excessive *Dur* tendency. The *Dur-Moll* method in this connection, however, yields uncertain results. (See Case VIII)

The *Dur-Moll* proportion is in the normal profile equalized (virtually). In this case, however, the cause is not to be found in a stable bisexual drive structure, but in a *change,* in a shifting of the psychosexual drive proportion. (c. f. the *Dur-Moll* ratio in the *Vordergrund* and in the *Hintergrund,* (in this case the *Hintergrund* (background profile) revealing the transformation.) This man[12] was formerly a passive homosexual, but has begun now to seek out an active homosexual partner and to behave toward him as a man instead of a woman.

Normal profile:	S ♂	Sch ♂ ♀	C ♀
Empirical complimentary profile:	S ♂	Sch ♂ ♀	C ♂

The partial concordance in the case of "S" and "Sch" is an indication for homosexuality.

In a certain group of homosexuals this alternating from the passive to the active role occurs rather frequently. In these cases there is probably basically a strong bisexuality which directly makes this changing sexual role possible. In this case the empirical complimentary profile shows, moreover, that in the *Hintergrund* the *Dur* component is significantly stronger, the *Dur-Moll* proportion being 2 : 1, while in the normal profile it is still equalized.

It must be concluded from the test results that *bisexuality* manifests itself in two ways:

1. In the striving to realize both sex roles, that is, to want to be both man and woman at the same time. This is the case, for example, in case 2, of the transvestite. According to the psychoanalytic concept, the transvestite wants to be a woman with a penis, and to hide the penis under feminine clothing.

2. In a capability to change from the feminine to the masculine role. That means the easy capability for a transformation of the psychosexual drive proportion.

Discrepancies between the "S" and "Sch" vectors, between genital sexuality and ego-ideal construction are found:

1. In pure bisexual structures (genital, somatic, and psychological hermaphrodites with a homosexual object choice. In this group a peculiar form of existence is to be found, which encompasses feminine as well as masculine behavior. Such human beings are neither men or women, but double-sexed creatures.

Refer to case 3. To complement

[12] Translators note: For a discussion of the *Die Komplementmethode* (complimentary method) which provides a foreground and background analysis of the drive components, the reader is referred to *Triebpathologie* by Szondi, pp. 198-236.

this case, we bring four additional original profiles:

	S		P		Sch		C	
	h	s	e	hy	k	p	d	m
I	−	+	±	+	0	+	−	+
II	−!!	+	0	±	0	±	±	+
III	−!!	+	+	−	+	0	+	+
IV	−!!!	0	+	−	0	−	+	+

This woman evinces extreme masculinity. In contradistinction, however, to an active homosexual woman, she has already realized all that which femininity possesses (a feminine ego). The feminine tendencies or strivings, therefore, are *not* repressed.

2. With reference to fetishism. *Schicksalsanalyse* (a form of psychoanalysis) postulates the theory that the fetish is a symbol of the genitals of the opposite sex. The fetishist wants to complement his being with these symbolic genitals. On the basis, therefore, of the adduced theory, one may say that the bisexual individual wants to be a double-sexed creature. (Case IX)

3. Unfortunately, there is lacking up to this time a systematic investigation of the operation of this discrepancy between the "S" and the "Sch" vectors. We have found this discordance or discrepancy

CASE IX 20 year old Male Fetishist

	S		P		Sch		C		Total
	h	s	e	hy	k	p	d	m	
Dur	0	0	1	0	6	6	0	0	13
Moll	6	6	3	0	0	0	1	6	22
	0		1		12		0		
	12		3		0		7		
	♀		♀		♂		♀		

CASE X 20 year old Man

	S		P		Sch		C		Total
	h	s	e	hy	k	p	d	m	
I	±	−	+	−	+	0	+	0	
II	±	+	−	−	0	−	+	+	
III	0	0	−	+	+	−	−	+	
IV	±	−	0	−	+	+	0	0	
V	+	−	0	−	−	0	+	±	
VI	0	−	−	+	±	0	0	±	
VII	+	−	0	±	0	0	0	±	
VIII	+	−	0	±	+	−	0	±	
IX	+!!	−	−	−	0	−	0	±	
X	+	−	±	±	−	0	0	+	
Dur	0	1	4	1	5	5	3	0	19
Moll	5	8	1	5	3	1	1	3	27
	1		5		10		3		
	13		6		4		3		
	♀		♂♀		♂		♂♀		

hitherto, however, in the following disorders:

Don Juanism, narcissism, frigidity, potency disorder, triolism (triangular sex performance in accord with Magnus Hirschfeld's concept), pseudo-masculinity, and various character neuroses.

In all these disorders there is manifested in the sexual matrix a divergent behavior in relation to the ego structure, mostly so that a strong *persona* is developed in the Ego, which the deeper lying sexual strivings, that have themselves developed in a contrary direction, are obliged to inhibit. For example: If one finds in a man a masculine sexual constellation (S − +) and a feminine ego structure (Sch O±), then the aggressive sexuality will be fended off through a passive ego behavior. Or: (See Case X)

Here is found the reverse constellation: feminine sexual vector, with masculine ego vector. The wish to assume the womanly role in the sexual relationship is overlaid by a pseudo-masculine, narcissistic pattern of behavior. The testee liked to boast about his sexual conquests, which were only to a minor degree based on reality. He suffered from a defloration mania (a drive to deflorate virgins), and believed he must transform virgins into women who had experienced carnal knowledge.

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The Mosaic Test As A Diagnostic Instrument and As A Technique For Illustrating Intellectual Disorganization

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This paper has two purposes: first, to describe certain limitations of the Mosaic Test as a diagnostic instrument for adults, and second, to use some of the test results as illustrations of types of disorganization which occur in mental disorders.

This test was devised by Margaret Lowenfeld in England and was intended as a projective technique to be used in the assessment of personality. The material of the test consists of a standardized collection of small flat pieces of plastic in red, yellow, blue, green, black, and white. Each color is available in five different shapes.[1] The 456 pieces are placed before the patient along with a tray with raised edge, the inside dimensions of which are 12 3/8" by 10 1/4". The patient is requested to "make something" on the tray using as many of the pieces as he likes. In order to keep a record of the performance a piece of neutral colored paper is placed on the tray on which the patient's productions may be traced and later colored.

One hundred psychiatric patients form the population on which this study was based; eighty-three of them were hospitalized, seventeen were ambulatory. There was no basis for selection of these patients. The writer simply took the first one hundred adult patients whose mosaics she collected as part of a battery of psychological tests and on whom an adequate psychiatric diagnosis could be established independently of psychological tests.

The patients, forty males and sixty females, all come from an above average socio-economic level and all of them have average or above average intelligence as indicated unequivocally either by educational or vocational achievement or by intelligence tests. Their ages range from sixteen to eighty-one with a median of thirty-two.

The patients were diagnosed by the psychiatrists familiar with them (usually more than one in each case) in the following categories:

- 54 schizophrenics
- 1 schizophrenic with frontal lobotomy
- 1 schizophrenic with epilepsy
- 12 questionable schizophrenics (i.e., patients about whose diagnosis there was disagreement among the psychiatrists; one or more considering the patient schizophrenic; one or more considering him more essentially neurotic)
- 3 manic depressives
- 24 neurotics
- 5 patients with cerebral damage
  - 3 cerebral arteriosclerosis (one with frontal lobotomy and previous diagnosis of involutional psychosis)
  - 2 senile dementia

From these one hundred patients a total of one hundred and sixty-five mosaics was obtained; one each from fifty-three patients, two each from thirty-four patients, and three four, and five tests from nine,

[1] In each of the 6 colors there are 8 squares, 1 3/16"; 16 right angled triangles, 1 3/16" by 1 3/16" by 1 9/16"; 12 equilateral triangles, 1 9/16"; 24 scalene triangles, 1 9/16" by 1 6/16" by 3/4"; 16 diamonds, 1 3/16", angles 45° and 135°.

three, and one patients respectively. Whether more than one test was obtained from a particular patient depended simply on the circumstances of how much time was available or how much time had to be spent waiting for an attendant to come for the patient.

All but thirteen of the tests were administered by the present writer and those thirteen were administered by students working under her supervision.

In classifying the mosaic performance in this paper no attempt has been made to utilize the patients' method of procedure, but only the finished production which can be scanned by any observer, not merely by the examiner who administered the test.[2]

The mosaics can be classified into the large general categories of concrete, abstract, and symbolic. By concrete is meant that some object or group of objects is represented, such as a house or farmyard, and so designated by the patient. The abstract mosaics are non-representational productions about which the patient says either that he had nothing particular in mind or that it is a "design", an "abstraction", or the like. The symbolic mosaics look like abstract designs of varying degrees of regularity and orderliness of organization, but they are designated by the patient as having symbolic meaning. For example, "The black is melancholy; the white is lethargy; the red is exhilaration; it all happens to the same person."

There is no strong predominance of any diagnostic category among either the fifty concrete or the one hundred and eleven abstract mosaics. It is interesting that no patients with known organic brain damage made concrete mosaics, but the small number of patients permits no definite deductions therefrom. Symbolic mosaics were made by only four patients, three schizophrenics and one neurotic. Again the small number prevents drawing any conclusion except the simple statement that a symbolic mosaic can be produced by schizophrenic and by neurotic patients. Thus, whether a patient produces a concrete, abstract, or symbolic mosaic is not of any particular diagnostic significance.

Looking more closely at the concrete mosaics, it is possible to subdivide them into two categories, (1) those consisting of one single object, and (2) those consisting of more than one object. Again there is nothing diagnostically differentiating about this grouping. Schizophrenic and neurotic patients fall in both groups, in roughly equal proportion. There are a few concrete mosaics which stand out as being very meagre or carelessly executed, but the proportion of schizophrenic patients who produced these is not greater than that of non-schizophrenic patients (three out of five meagre ones, one out of three careless ones.)

Abstract mosaics, which numerically constitute the largest bulk of productions in this study, yield a little more in the way of significance when an attempt is made to subdivide and classify them. They may be thought of as falling on several continua, all starting from a pinnacle group consisting in each case of one large, highly complex,

[2] The writer is well aware that no skillful clinician administering this or any other test will fail to make use of the patient's method of procedure in interpreting the results. On this test, however, it is especially difficult to record the procedure in a form which can be accurately and easily communicated to another worker. Thus this aspect of the test cannot readily be evaluated by more than one person and loses thereby in objective significance.

well-organized pattern and extending "downward" to smaller, more multifarious, simpler, or less integrated forms. In the pinnacle group are found patterns which seem to require the highest degree of planning and ability to carry out the plan. Balance, including some symmetry of color and form, is required for membership in this group. The high degree of organization means that all the pieces are planfully interrelated so that no single piece can be changed without disturbing the balance of the whole.

Although this description of the mosaics belonging to the pinnacle group is based on objective criteria, it will always remain a matter varying to some degree with subjective judgment which mosaics possess more or less of the requirements for membership in such a group and the borderline cannot be rigidly fixed.

A psychologist[3] was requested to select twenty-two, i.e., the top twenty percent of the one hundred and eleven abstract mosaics as belonging to the pinnacle group. The eighteen patients who made these mosaics fall into every diagnostic category including five clear schizophrenics, three of whom are among the more severely disturbed chronically ill psychotics, and two with organic brain damage. The fact that these two patients have been persons of very superior intelligence is no doubt relevant. But their presence here along with that of the very sick schizophrenics seems to indicate again the dubious value of this test as an instrument of diagnosis. One clear negative finding emerging from the present study is that the production of well-organized, complex mosaics is not permissible as evidence that the patient making them is not schizophrenic or that he does not suffer from organic brain damage.

Turning now to those abstract mosaics which do not readily fall into the pinnacle group, we may, as mentioned above, think of each one as falling somewhere on each of four separate continua.

The first continuum may be described in terms of size and number of pieces used. In the pinnacle group the designs cover all or a large part of the board and use many pieces. At the lowest end of this continuum, we find a mosaic consisting of one single piece. It is possible to rank the mosaics on this continuum by objective criteria of area covered and number of pieces used. In the lowest twenty percent of this population fall those mosaics in which not more than fourteen pieces are used and an area of not more than twenty-three square inches is covered. In the lowest ten percent fall those in which not more than six pieces are used and an area of not more than twenty square inches is covered.

The second continuum may be described in terms of number of separate gestalten. In the pinnacle group the board is integrated as a unit. Then we find mosaics consisting of two separate units and at the lowest end of the continuum in this population we find fifteen separate unrelated units. In the lowest ten percent of the continuum we find mosaics consisting of from five to fifteen separate gestalten.

[3] The writer is indebted to Miss Elizabeth Broomhead, Senior Clinical Psychologist at the Bethesda Naval Hospital, for making the selection of the pinnacle group and also the selection of the low ends of two of the continua described below. This was done without any knowledge on the part of Miss Broomhead of the identity or diagnosis of any of the patients.

The third continuum may be thought of in terms of complexity of organization. At the top of the pinnacle all the colors and shapes are used in a complicated pattern. At the low end of this continuum we find forms consisting of only one color and one shape in a simple form such as a hexagon consisting of six triangles or a straight line consisting of six squares. In this and the following continuum the ranking of the mosaics has to be based on subjective judgment keeping the objective criteria in mind.[4]

The fourth continuum may be thought of in terms of degree and integrity of organization. The mosaics of the pinnacle group are not only complex in structure but the organization is such that every piece has an identifiable relationship to the whole. Then we find patterns in which the organization of form or color or both shows some loosening or breakdown, and finally, at the low end of the continuum, the placement of the pieces on the board is quite random and without any perceptible organization whatsoever.

If we consider now the type of patient who made the mosaics at the low ends of the continua, i.e., those mosaics which are (1) small in size, or (2) consist of several or many gestalten, or (3) are overly simple, or (4) are faulty in organization, we can come to positive or negative results depending on how low we cut off the continuum. If we take the lowest twenty percent of the mosaics on each one, we find practically every diagnostic category represented without very significant clustering. However, if we include only the lowest ten percent, we find on three continua nothing but clear schizophrenic and organic patients. On the fourth continuum, namely among the most poorly organized mosaics, we find in the lowest ten percent six clear schizophrenics, one questionable schizophrenic, two organics, and two neurotics. The presence of the two neurotics here is noteworthy again as a negative finding especially since both patients were and had been effectively and continuously engaged in responsible professional activity. Both were under psychoanalysis for personality problems, but they had always functioned adequately in their work which called for a high degree of intellectual organization.

The clustering of schizophrenic and organic patients at the lower ends of three of the four continua corresponds to the tendency of these patients to disorganization of behavior and to simpler levels of performance observable clinically and on other psychological tests. But the presence of two fairly adequately functioning neurotics in the lowest ten percent of one continuum, together with the presence of others in the lowest twenty percent of all continua and the presence of some very sick patients in the pinnacle group, indicates clearly that whether or not a person organizes the perceptual field in a superior way under the conditions of this test correlates very poorly with his ability to organize his life and his thinking. The finished productions of the Mosaic Test are an inadequate instrument for detecting the presence of and for measuring the degree of personality disorganization in adults. But this very fact is illustrative of the way patients and people in general behave. So-called normal people may have temporary aberrations which

[4] This was done as described above by Miss Elizabeth Broomhead.

look like symptoms of mental disorder. One isolated bit of behavior can rarely be used to decide whether a person's long term patterns can best be described as neurotic, schizophrenic, or anything else. In other words, some disorganization or regression to primitive levels may be found at some time in practically anyone. In this population the test showed disorganization in this particular task in patients from all diagnostic categories and in patients who might be considered by some criteria to be "normal", as well as among the most severely disturbed.

When disorganization does appear on this test it is in such a vivid and concrete form that the mosaics become useful in defining and clarifying its nature as it appears in visual-motor behavior. We can, for example, translate the low ends of the four continua of mosaic patterns into the following general terms which are applicable to all visual-motor behavior:

1. Decrease in quantity of output.
2. Decrease in the ability to see or construct a relatively large area as a unified whole and a consequent breaking up of the whole field into unrelated small parts.
3. Decrease in the ability to integrate many *diverse* parts into a meaningful entity and a consequent exclusion from the field of anything but identical or very homogeneous parts.
4. Decrease in the ability to *complete* a construction (comparable to an inability to "close a gestalt") and consequent production of a fragment (or fragments) which is loosely knit or not knit at all rather than of a closed unit or units.

The above list makes no claim to completeness but does cover the data presented in this paper.

The four kinds of disorganization of visual-motor behavior just described are especially easy to see on the Mosaic Test, but can also be identified on other psychological tests, such as the Rorschach, which require organization of the perceptual field.

The coincidence in certain types of performance of schizophrenic and organic patients which has been mentioned in this paper does not, of course, necessarily indicate a similarity in the nature of the disorder. It simply confirms a frequently made observation that certain aspects of the behavior of schizophrenics resemble that of brain-damaged patients. The degree and kind of disorganization shown by both groups vary, of course, enormously from case to case. It would be foolish to try to draw conclusions about organic patients on the basis of the small number included in this study. But one finding may be suggestive for further investigation. The organic patients in whom the defect in mental function was gross, as measured by intelligence tests and general behavior (ability to take responsibility for personal needs, to make unaccompanied trips, and the like), were those whose mosaics were to be found at the low ends of the continua. Those in whom the defect was smaller were those in the pinnacle group. This same clear correlation was not found among the schizophrenics nor among the neurotics. Some patients who were grossly psychotic and unable to be on any but a disturbed ward were among the pin-

nacle group and some patients whose behavior permitted out-patient status were found at the low ends of the continua.

In working with the test it has been tempting to try to translate the four kinds of disorganization represented by the four continua into interpersonal terms, thus formulating four ways in which not only visual-motor behavior but interpersonal behavior may become disorganized in mental illness or with organic brain damage. The following four types of disorganization are offered as possibly useful systematic ways of thinking about patients' behavior in assessing changes under therapy, type and degree of illness, etc., ways which would avoid some of the more poorly defined psychiatric terminology.

1. Corresponding to the mosaics of small size and to the "decrease in output": the patient takes no (or very few) steps toward contact with other people. This is meant in a simple, literal sense involving motor activity either of speech or gross body movement.
2. Corresponding to the many separate gestalten and to the "decrease in ability to see a large area as a unified whole": the patient has "islands" of appropriate behavior and relatedness, but cannot attain a stable, long-term plan or way of living.
3. Corresponding to the overly simple mosaics and to the "decrease in ability to integrate many diverse parts into a meaningful entity": the patient behaves to all people in the same manner or has only two or three ways of behaving, rather than a great variety of ways which he can shift appropriately depending on the person or persons he is with.
4. Corresponding to the poorly organized mosaics and to the "decrease in ability to complete a construction": the patient's behavior shifts rapidly and unpredictably, not with appropriate consideration of the person or persons with whom he is dealing, but with an apparent lack of directedness either from within or from without.

It must be noted that, although the above types of interpersonal disorganization were suggested by the Mosaic Test and although they do indeed occur in the patients of this population, the writer was unable to establish that the type of disorganization shown by a patient's mosaic was clearly indicative of the particular kind of disorganization of interpersonal processes shown by that patient clinically.

The mosaics produced by this particular population of adult patients have proved stimulating to the present writer in theoretical formulation. They have also in individual cases provided valuable clues about the patient's illness and character. They have not, however, on the whole proved to be reliably useful in arriving at a psychiatric diagnosis.

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The Stimulus Value of the Szondi Pictures: A Theoretical and Empirical Study

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GOAL AND METHOD OF INVESTIGATION

Many psychologists have started to use the Szondi Test and found it useful. Yet the rationale underlying test interpretation is often rejected.

This paper deals with the theoretical problems raised in connection with the stimulus value of the pictures. We feel that studies which are based on statistical methods disregarding the psychological principles underlying the test's interpretation are unsatisfactory. As with any projective technique, it is difficult to summarize the results, so that they are both statistically significant and meaningful. For example, since the reaction h+ is typical for normals as well as for many psychotics, it cannot be used to differentiate between these groups. The clinician familiar with the test will take into account the total configuration of the reactions, the number of loaded and open reactions, and the degree and kind of changes after retest. These considerations are not reflected in the statistical analysis of reactions, e.g. an investigator may find that despite the low reliability of the Szondi, test and retest matching of an experimental group according to the criteria of test interpretation produces 94% success in matching the right pairs (4).

Therefore we intend in this study to combine the quantitative analysis of statistical data with a qualitative approach.

One problem connected with the stimulus value of the pictures is whether these photographs, taken in Europe around 1900 have meaningful stimulus value for the American today. The other objection is that the test reactions might be more adequately explained by the specific stimulus value of each picture so that there would be no proof for the presence of a common factor determining the reactions to the six pictures as a group.

Guertin (3) found that there is high picture-for-picture agreement upon retesting, but if the subject is tested with one half of the test and retested with the other half, there is no inter-test reliability. He concludes: (p.404)

> " . . . The high picture-for-picture agreement seen upon retesting with the same Szondi pictures has not been adequately explained by the current rationale of need systems . . . It appears that special stimulus aspects of the pictures are being ignored by the current thinking about the Szondi . . . It is concluded that Szondi need system variables cannot be considered adequate for explaining all test behavior."

We shall examine these questions on the basis of data obtained from three groups of different age and nationality. We shall look for the specific stimulus value of each picture in terms of occurrence and direction of choice. The obtained data will be compared with Szondi's data and discussed in their relationship to Szondi's theoretical assumptions.

Group I and II are composed of 50 children (boys and girls) each, selected from pupils of the Greenfield School and the Roosevelt

TABLE I—Reactions to Szondi Pictures, Group I.

	h		s		e		hy		k		p		d		m		Sum
	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	
I	4.0	6.0	9.0	3.0	*17.5*	1.0	2.0	*14.0*	5.5	7.0	2.0	*13.0*	*8.0*	1.5	2.0	4.5	100.0
II	*14.5*	.5	9.0	1.5	4.5	7.0	3.0	5.0	*12.0*	1.5	1.0	*17.0*	4.5	1.5	1.5	*16.0*	100.0
III	*13.0*	2.0	*16.5*	1.5	1.0	6.5	7.0	3.5	1.0	*14.0*	2.5	*11.5*	5.0	1.0	4.0	10.0	100.0
IV	*18.0*	1.0	*16.5*	.5		*21.0*	6.0	2.5	2.0	1.5	4.0	6.5	1.0	*13.5*	2.5	3.5	100.0
V	*16.5*	.5	5.0	3.5	*14.5*		.5	*15.0*	4.5	2.0	3.0	7.0	4.5	4.5	1.5	*17.5*	100.0
VI	8.0	1.5	*16.0*	1.0	9.0	4.5	3.5	7.0	7.0	8.0	5.0	3.0	.5	7.0	1.0	*18.0*	100.0
Sum	74.0	11.5	72.0	11.0	46.5	40.0	22.0	47.0	32.0	34.0	17.5	58.0	23.5	29.0	12.5	69.5	600.0
+ and −	85.5		83.0		86.5		69.0		66.0		75.5		52.5		82.0		

TABLE II—Reactions to Szondi Pictures, Group II[2]

	h		s		e		hy		k		p		d		m		Sum
	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	
I	3.0	*9.0*	7.0	7.0	*17.0*	.5	4.5	5.5	1.0	*17.0*	1.5	7.5	5.0	2.0	*11.0*	1.5	100.0
II	*9.5*	5.0	*13.0*	3.0	3.0	6.0	1.0	*15.5*	*11.0*	1.0	3.0	*9.5*	7.0	2.0	2.5	8.0	100.0
III	9.0	3.5	*10.0*	6.0	3.0	4.5	2.0	*12.0*	1.0	*14.0*	8.0	2.5	7.0	2.5	*10.0*	5.0	100.0
IV	*14.5*	.. ..	*18.5*	1.0	1.5	*9.0*	2.5	4.5	5.0	7.0	3.5	6.5	1.0	*18.5*	3.5	3.5	100.0
V	*20.0*	1.0	1.0	*11.5*	*9.5*	4.5	3.0	*12.5*	5.0	2.0	5.0	5.5	.5	6.5	6.0	*6.5*	100.0
VI	*12.0*	1.5	*11.0*	6.0	8.0	2.5	*11.0*	4.5	6.5	7.5	1.0	*11.0*	.5	6.5	.. ..	*10.5*	100.0
Sum	68.0	20.0	60.0	34.5	42.0	27.0	24.0	54.5	29.5	48.5	22.0	42.5	21.0	38.0	33.0	35.0	600.0
	88.0		95.0		69.0		78.5		78.0		64.5		59.0		68.0		

TABLE III—Reactions of Group III[2]

	h		s		e		hy		k		p		d		m		Sum
	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	
I	3.5	5.1	4.7	6.2	*13.1*	2.4	3.1	*10.1*	3.2	*11.4*	4.2	5.4	*13.8*	3.7	4.4	5.7	100.0
II	*13.6*	2.7	8.9	5.4	2.6	6.0	2.9	*13.1*	4.5	5.3	*13.4*	4.0	1.4	2.7	2.7	*10.8*	*100.0*
III	4.2	5.1	*14.6*	1.6	3.3	6.6	2.0	*10.3*	.9	8.8	1.9	*9.9*	7.4	2.3	*15.7*	5.4	100.0
IV	5.9	2.3	8.4	3.3	*11.7*	5.0	2.6	5.5	2.8	*11.4*	*9.7*	4.5	5.9	11.1	3.0	6.9	100.0
V	*21.9*	1.3	1.8	4.2	2.6	7.4	*9.5*	6.0	3.6	5.8	4.3	6.9	1.6	7.5	4.7	*10.9*	100.0
VI	7.0	1.4	6.3	3.6	3.9	*13.4*	*9.2*	2.8	6.6	8.5	3.1	6.3	5.3	7.0	8.6	7.0	100.0
Sum	56.1	17.9	44.7	24.3	37.2	40.8	29.3	47.8	21.6	51.2	36.6	37.0	35.4	34.3	39.1	46.7	600.0
	74.0		69.0		78.0		77.1		72.8		73.6		69.7		85.8		

TABLE IV—The Stimulus Value of Each Picture.

Series	group I	group II	group III	group I	group II	group III	group I	group II	group III	group I	group II	group III
		h			s			e			hy	
I	—	—	—	+	—	—	+!!	+!!	+!	—!	—	—
II	+!!	+	+!	+!	+	+	—	—	—	—	—!	—
III	+!	+	—	+!!	+	+!	—!	—	—	+	—!	—!
IV	+!	+!!	+	+!!	+!	+	—!!	—!	+	+	—	—
V	+!!	+!!	+!!	+	—	—	+!!	+	—	—	+	+
VI	+!	+!	+!	+!!	+	+	+	+!	—	—	+	+
		k			p			d			m	
I	—	—!	—	—!	+!	—	+!	+	+	—	+	+
II	+!	+!!	—	—!!	—	+!	+	+	+	—!!	—!	+
III	—!!	—!!	—!!	—	+!	—!	+	+	+	—	+	+
IV	+	—	—	—	—	+	—!!	—!!	—	—	—	—
V	+	+	—	—	+	—	—	—!!	—	—!!	—	—
VI	—	—	+	+	+!!	—	—	—!!	—	—!!	—!!	+

School, Pittsburgh, Pa.[1] All children are considered normal by their teachers and principals. The mean age of group I is 6 years 11 months; the mean age of group II is 11 years 11 months. Each child was given one Szondi test. The sum of reactions in each series of pictures is 4 x 50 = 200 (for each group). The sum is 1200, equally divided into "like" and "dislike" (+ and −) reactions.

Group III is composed of 25 boys and girls with an age range of 13-15 years. All the children came from Turkey to Israel and lived there for one year in a Children's Home.[1] To each child 10 tests were administered. The reactions in each series, therefore, are 4 x 10 x 25 = 1000, equally divided into positive (+) and negative (−) reactions.

STATISTICAL ANALYSIS OF DATA

Tables I, II, and III show the percentage distributions of choices for each group.[2]

Table IV shows the stimulus value of each picture according to the most frequent positive or negative choice in each group. A stimulus value "+" means that the picture has been liked more often; "−" means that the picture has been disliked more often. "!" indicates that the proportion between positive and negative choice is at least 5:1; "!!" shows that the proportion is at least 10:1. If the proportion between choices was 1:1, the most typical value according to the choice of the other groups has been assigned to each picture.

From the inspection of these tables it follows that:

1. The choices are unequally distributed horizontally. In each series are two pictures which have been chosen most frequently as + or − respectively. These are the typical reactions or "popular choices" for each group. These choices constitute a "typical profile" for each group:

	h	s	e	hy	k	p	d	m
Group I	+!	+	+	—	—	—	O	—!
Group II	+	+	+	—	—	—	O	+
Group III	+	O	+	±	—	+	—	±

2. The choices are not evenly distributed in each factor. In the h factor, for example, the choice is mostly positive, but hV is liked by

[1] The author is indebted to Mr. John Warren Whytmire for the use of his data (1951) and to the "Szold Institute", Jerusalem and the Children's Home "Ahavah", Haifa, for their help in obtaining this data.

[2] In groups I and II, 2 choices are 1%, in group III, 10 choices are 1%).

most subjects and hI is mostly disliked. The + choices of the h factor in group III are composed in most of the cases of hII and hV, or similarily the + choices of the p factor by reactions to pI and pIV. If we examine the reactions in group III we find also that a subject who maintains the same reactions during most of the ten profiles will use the same pictures every time.

3. In most of the factors (four factors in group I, seven in group II and III) at least two pictures are positive and two are negative. The clear-cut factorial reactions in Group I are probably due to the small variance of reactions among the youngest children.

The agreement between the three groups with regard to the stimulus value of the pictures is very high. In 24 pictures there is agreement among all three. In 13 pictures two groups agree and the disagreement of the third group is either statistically insignificant or according to the expected trend of development.

It is expected, for example, according to Szondi's data and in agreement with developmental theories that with increasing age the percentage of s— increases. In group I all 6 s pictures are +, but sI and sV receive more negative reactions than the other pictures. They are definitely minus in group three. In group II sI is equally chosen plus and minus, while sV is minus. Although there is a difference between the groups, it follows an expected trend.

In 11 pictures there is disagreement in one group which cannot be ascribed to the age factor. The factor p is surprising, because there is no agreement between group II and III. It is theoretically expected that p+ increases with age.

From these data it is concluded that

1. There is no essential difference in the reactions of the three groups to the test. The difference in ethnic background does not impair the validity of the test.

2. Most of the pictures have a definite positive or negative stimulus value.

3. The pictures differ with regard to the intensity of their stimulus character.

Rationale of Test Behavior

We shall now discuss the implications of these findings for the rationale of the test interpretation. Szondi maintains that the pictures represent 8 different basic psychological needs. The hypothetical "need-tension" of the subject is supposed to be the main determinant of test behavior. Therefore the same interpretation is given to the reaction to any s picture, or e picture, and the scoring system does not take into account the series from which a picture is chosen. It might seem that ideally the number of choices for each factor should be divided equally among the six series. The most frequent reaction to h is positive. We should therefore expect the h pictures to be more liked than disliked. But further consideration shows that, according to the need-tension theory, *the test would not function at all if the stimulus value of all the pictures were equal.*

Szondi assumes that the personality is determined by the interaction of dynamic psychic drives which strive toward manifestation. The tensions of these drives are unequal. They are partly accepted by the ego and partly rejected. All strive toward expression, but may reach their goal in different ways. One way to lower a need tension is by association with a person who displays this need (genotropism). It is assumed that the test pictures stimulate associations connected

with these specific needs, and that the subject's choice is directed by his most dynamic needs. In a well-adjusted person the different needs tend toward equilibrium. If several needs maintain a very strong tension, the person is psychologically disturbed. Therefore the heavily loaded reaction is an indication of mental stress. There is, of course, no absolute need-equilibrium in any person, but below a certain threshold, tension-difference is not measurable by means of this test. We expect therefore that the normal subject will react to two or three pictures in one direction in most of the factors.

Now we administer the "ideal test" in which the pictures are absolutely equated so that the only difference in stimulus is caused by the evoked associations in the specific need field. These pictures are shown to the normal subject in whom the need-tension of most of the factors is equal (for test considerations). The subject sees the first series and is equally stimulated by most of the pictures. His choice will be determined by some personal association. After the first choice the relative need-tension remains the same. In the second series he faces the same situation. Actually the choices would be determined by chance only. The subject might react to the same factors in all the series and give four loaded reactions.

As the test is composed now, the person with strong need tension will react to 5 or 6 pictures in any one factor. Because of the strength of his need he will not be influenced by the "popularity dimension" of the picture. The normal person's choice will be determined by the popular stimulus value of the picture if the popular choice lies in the same direction as his need, e.g. if the subject's need-direction is h—, he will ignore hV and react to hI and hIII. In this way he avoids counteracting the popular stimulus value. The normal k+ person would avoid the generally disliked kI (Table IV).

The table on page 100 represents the reactions of a boy of group III, whose reactions were unusual for his group. This is the general trend of choices: If the need is not in the same direction as the popular choice indicates, the popular pictures are partly avoided. In group III 33.6% of the reactions to k are + or O. In these cases at least two of the popular choices: kI, kIII, kIV (negative stimulus value) have been avoided; 22.0% of the reactions to this factor are + or ±. In this case, at least two pictures of k have been chosen +.

We have seen that in most of the factors the stimulus values of two pictures do not follow the general trend. If, for example, the most typical reaction to the factor hy is negative, there are nevertheless two hy pictures with a positive stimulus value. These differences in stimulus value are very important. They enable us to differentiate between normal tension and strong tension. They create a test situation where some pictures appeal to each subject even though his needs may not tend in the general direction. The reactions to three series may not give the subject an opportunity to react according to his needs because he may not yet have been confronted with pictures which have a stimulus value in accord with the direction of these needs.

Therefore the distribution of choices does not force us to reject the need theory underlying the interpretation of the test. It is possible to explain test behavior as determined by individual need-tension, and more so; the differences

	positive								*negative*					
h:									I,	II,	III,	IV,		
s:	I,									II,				VI,
e:													V,	
hy:	I,				V,									
k:		II,		IV,	V,									VI,
p:		II,	III,											
d:			III,	IV,		VI,			I,					
m:						VI,					III,	IV,	V,	

Summary:	h	s	e	hy	k	p	d	m
	—!	—	O	+	+	+	+	—

Space does not permit a thorough analysis of this profile, but to anyone familiar with the technique of interpretation, the profile would reveal the following characteristics: This boy is suppressing his sexual needs. He is trying to sublimate. He tries to manipulate his environment intellectually and appears to be rather narcissistic and non-conforming. (Actually the profile changes in the series and the final interpretation needs modification.) The non-conformity is expressed by his reactions to the popular pictures too. Twice he chooses a popular picture in the same direction as the popular stimulus value. But six times when he reacts to a popular picture his reaction is *reverse*. For example, the picture hII is liked by most subjects of his group and is rejected by him. Or, he reacts m—, but this negative reaction is not composed of both popular m— pictures (mII, mV); It is composed of one negative and one *positive* popular m picture. In some cases, however, he neglects simply popular pictures which are not in accordance with his needs. (hV, sIII, eI, eIV, eVI, hyI, hyIII, kI, kIII.

in stimulus value of the pictures seem to be a primary condition for the functioning of the test.

So far this reasoning does not prove that the choice of different pictures for one need-factor is actually determined by the same underlying psychological factor. Nor has there been an answer to the question whether the present mode of test interpretation takes into account all or at least the most important factors which determine test behavior. These questions need further examination.

Empirical Validation of the Test Qualitative and Quantitative Analysis

The method of interpretation assumes that a single factor determines the reactions to all of the pictures of one group. The interpretation of the test is made without consideration of the specific pictures which have been chosen. For example, reactions to the factors s and e in general are thought to be indicators of the way the subject handles aggression and hostility. It has been found empirically that rejection of three s pictures has the opposite psychological meaning to choice of three s pictures. This is valid regardless of which of the six pictures have been chosen. Therefore it is concluded that a common psychological factor determines the choice or the rejection of any of the s pictures.

A statistical analysis of the data supports the need theory too. According to this theory, most subjects should give a loaded reaction in one or two factors and an open reaction in one or two others. In four to six factors they should react to three pictures. But the subjects would differ with respect to the factors which are open or loaded. While subject A might give a loaded s reaction, subject B might give an open s, etc. Therefore, if we summarize the reactions, we

TABLE V. The Loadedness of the Factors, Average for group III (for a 10 test series)

a. Average reaction to the different factors.

m	e	hy	h	p	k	d	m
34.32	31.20	30.84	29.60	29.44	29.12	27.88	27.60

b. Reactions most loaded — less loaded factor.

1st	2nd	3rd	4th	5th	6th	7th	8th
41.32	37.44	34.60	32.08	28.76	25.20	22.24	18.36

expect to find the following results:

1. The average of the most loaded factor should be four or more reactions. The average of the less loaded factor, two or less. (The mean is computed by the sum of the reactions which each subject gives to "his" loaded factor.) The difference will be more striking in clinical groups.
2. The average reaction to each factor should tend toward equilibrium.

The average of choices was determined for group III. In this group each subject was tested ten times. Table V shows that on the average each factor receives 27.6 — 34.2 choices. The expected mean is 30.0, and there is no significant difference between the factors with respect to loadedness (chi-square= 1.077). Then we counted for each subject the number of choices falling on each factor and arranged them in descending order. We got eight columns, the first column indicating the number of choices in the most loaded factor. After adding these columns we found (Table V) that on the average the most loaded factor is 41.3 choices, the least loaded — 18.4 choices. The chi-square test shows a significant difference (chi-square = 14.308). As only a few subjects react to 5 or 6 pictures throughout the whole series, or only few give ten open reactions, and because many of the open reactions are composed of one + and one — choice, no factor has an average of five or one in a "normal" group.

In groups I and II the difference between the factors is much greater. This is due partly to the fact

TABLE VI. Distributions of Loadedness of Factors.

Sum of choices in 10 tests.	Order of Loadedness *1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*sum*
50-54	3								3
45-49	2	1							3
40-44	11	4	3						18
35-39	8	13	7	2					30
30-34	1	7	15	22	8	3			56
25-29				1	17	13	9	1	41
20-24						7	11	9	27
15-19						2	3	11	16
10-14							2	1	3
5-9								3	3
Range:	34-51	33-45	30-41	27-39	25-32	17-30	13-29	7-25	200 (25x8)

*Of 25 most-loaded factors, 11 received 40-44 choices; 2 received 45-49 choices in a series, etc.

that the older and less homogeneous group shows greater individual differences and partly to the fact that in group III each individual is represented by 10 tests.

Table VI shows that the loadedness of the factors for different subjects is uneven and distributed normally.

It is interesting to note that the "popularity" of the factors does not influence their loadedness. We should expect that the factor with the greatest number of "popular" pictures would have the greatest number of loaded reactions, because many subjects will react to many pictures of this factor, hy is "popular" 5 times. But only in 4 cases do we find that hy received 40 choices or more. The factor s, which has only one popular picture, received more than 40 choices in three cases. A factor was loaded by at least 40 choices 24 times as shown in Table VI.

Two of the popular hy pictures are plus and three are minus; but the sum of hy ± is 52 while the sum of hy O = 49, (out of 250 reactions), yielding a statistically insignificant difference of 1.2%.

These findings strongly support the factor theory of interpretation.

Szondi gives many statistical data on the distribution of choices in each factor and vector (factor-pair) in various age groups. The comparison of these data with those obtained in this study shows remarkable correspondence. Often there is no significant difference between the percentage given by Szondi and those found here. In many cases there are differences due to specific group factors, but *the general trend of development with increasing age is the same and in agreement with the theoretical expectations made on the basis of our general knowledge of child development.*

In Table VII we see the distribution of reactions in four factors, compared with chance expectation.

We find the following information in Table VII:

1. h+% remains the highest percentage, but decreases with age, while h—% (as reflected in the h — and the ambivalent (±) reaction) and open h show an increase.

2. s+ is the dominant reaction, but decreases rapidly with age; s— increases, although there is a slight decrease in group III (reflected by the absence of s±); and open s decreases in group II but increases greatly in group III.

3. k+ and open k decrease with age, while k— increases and becomes the dominant reaction.

4. p+, which is almost absent in group I, increases and holds the first place in group III and p— decreases.

The constellation of k and p (vector SCH=ego development) is very revealing. Table VIII shows the most important constellations.

It is important to remember that in this summary we did not take into consideration which pictures caused the reaction. We have seen

TABLE VII. Percentages of Reactions to factors h, s, k, p.*

	Chance expect.	h			s			k			p		
		I	*II*	*III*	*I*	*II*	*III*	*I*	*II*	*III*	*I*	*II*	*III*
+	30.7	86	68	67.2	74	50	44.0	22	14	14.8	6	18	34.4
—	30.7	4	6	6.8	4	18	19.6	26	52	59.2	68	42	26.4
±	15.9	4	14	10.0	4	22	6.0	12	12	7.2	6	10	14.4
O	22.7	6	12	16.0	18	10	30.4	40	22	18.8	20	30	24.8
	100.0												

* Groups I and II, N = 50; Group III, N = 250

(Table IV) that the p pictures liked by group II are disliked by group III and vice versa. A p+ reaction in group II more probably includes reactions to other pictures than a p+ reaction in group III does. These differences are not taken into consideration in the following interpretation.

Analysis of the reactions is based mainly on Szondi's book (5) especially chapters 7, 8, 19 and 21, and Psychodiagnostic Tables 1, 2, 4, and 22.) It is assumed that the reactions to the h and s pictures reflect the sexual attitudes of the subject, h representing the need for tenderness and love, and s the need for aggression. The + reaction shows that the need strives toward impulsive manifestation in its natural, unsublimated form. The — reaction is an indication of sublimation or repression of the need. The h—, s— reactions are given mostly by intelligent subjects (or by neurotics, in which case sexual repression is revealed). They correlate with high intelligence as revealed in the Wechsler-Bellevue Intelligence test and the Rorschach, and with highly organized ego reactions to the Szondi.

It is significant that in our data the sublimation process is revealed strongly in the s factor. The repression of aggression or the channelisation of aggressive impulses toward culturally approved goals is much more effective. The sublimation of sexual tendencies (h—) occurs at late puberty.

The open reaction means lowering of tension and often implies a weakness of the need. (If the need is dynamically strong, tension remains even after its manifestation). Open h is an infantile sexual reaction. It reaches its peak, according to Szondi (5, p. 259) at the age of 3-4 and during puberty. We find that it reaches the second place in group III. Open s indicates manifestation of aggression. It is an important reaction in the 6 year old group, but at the age of 12 the aggression is more effectively checked. In this group the ± reaction, which is interpreted as conflict between the 2 opposite tendencies, is greater than in group III. At the age of 11 the cultural tendencies are in conflict with the impulsive tendencies. The result of this conflict is an increased acting out of aggression at the age of puberty.

The psychological significance of the observed changes in the S vector with increasing age are as follows:

There is a clear tendency in the direction of intellectualisation and sublimation. It finds its expression predominantly by the inhibition of aggression. This development is most significant between the ages 6-11. At the age of 11 the struggle between natural impulses and culturally approved goals reaches its peak. With the age of puberty this struggle weakens and acting out of sexual impulses and aggression occurs.

This interpretation, based only on the need-tension theory is in agreement with the findings of other projective tests and with psychoanalytic theories.

In the SCH vector we find not only a clear-cut developmental trend, but a reversal of the dominant reaction pattern. Instead of k+ and open k, predominant in group I, we have a k— reaction in group III. Even more striking is the change from p— to p+[3].

The k factor represents the need to define the boundary between the self and the environment. It counteracts the need for psychic expansion (p) and by incorporating into the self the concepts which reach consciousness it determines the position of the various needs within the total psychic configuration. Its functions are introjection (k+) and repression (k—). k+ in younger groups means autistic thinking — not in the pathological

[3] A thorough investigation of the SCH reactions of group I and II has been made by Whytmire (7).

sense, but in Piaget's sense. It represents the second stage of ego development, where the child is aware of the difference between himself and the environment, but his concepts of the outer world do not yet coincide with the "reality-tested" concepts of the adult society. The other reaction typical for early childhood is open k. It reveals ego weakness; the theoretical assumption is that this is the infant's reaction before any self-awareness is present. It indicates reorganization of the ego (k=O, p=O) or a weakening of the k function because of the dynamic expansion of the p factor (kO, p+).

At the age of six most children abandon their autistic concepts and conform with the demands of society. This process might be connected with the beginning of a new social life at school. The child uses the mechanism of repression. In the Szondi test this stage is reflected by k—, which is the predominant reaction in all other age groups. The p need is the striving for ego expansion, for realization of innate potentialities and for relatedness to the outer world. Here Szondi's concepts are close to those of Sullivan and Fromm. The p mechanisms are inflation, i.e. dilation of the ego by different, sometimes contradictory, needs (p+), and projection in its wider sense (p—). p+ correlates with M in the Rorschach.

In group I projection is dominant (p—). Introspection is almost absent. With the beginning of puberty psychic inflation predominates.

The ego mechanism is better understood if the constellation of both factors is taken into consideration (Table VIII). SCH = O — and SCH = + — ("A") are the most primitive constellations. They are dominant in group I and decrease with age. The child projects his needs onto the outer world. He does not try to incorporate his concepts into his ego (open k) and identifies autistically with the environment (k+, p—); this mechanism is called "intro-projection".

TABLE VIII. Some Percentages in the SCH (ego) Vector.

SCH k p	Chance expect.	Group I	II	III
O —	7.0	22	14	6.4
+ —	9.4	22	2	5.6
Sum A*		44	16	12.0
— O	7.0	6	18	16.8
— +	9.4	....	4	21.6
Sum B*		6	22	38.4
— —	9.4	18	22	12.8
— +	4.9	2	8	8.0
O O	5.1	10	2	2.4
Total	52.2	80	70	73.6

* A and B refer to classification of "ego reactions" according to Szondi.

SCH — — is the mechanism of adaptation and conformity. It is the most frequent reaction of the general adult population. It means that the subject escapes the awareness of his needs by the use of projection and repression. The fact that the children of group I are already in school may account for the relative high proportion of SCH — — and SCH OO (breakdown of the old ego).

In group II we see an increase of SCH — — (dominant in this group). The "A" mechanism decreases; the "B" mechanism, typical of puberty, begins to appear. SCH — O is the "compulsion constellation". It goes together with compulsive symptoms. The psychic needs are repressed (k—); they neither reach consciousness, nor manifest themselves as projective (apperceptive) distortions. When the dynamic strength of the p factor is increased, inflation occurs and SCH — + appears. According to Szondi SCH — O is predominant at the age group 9 - 12, SCH — + at puberty with a peak at the age of 17 - 18 years. Our data confirm these findings. In group II, SCH — O is much more frequent than SCH — +. In group III SCH — O decreases slightly, and SCH — + is the predominant reaction of this age, while SCH — — decreases.

The general age development as reflected in these data is somewhat as follows:

From an ego stage in which projection and autism are predominant, there is increasing conformity at age 11. At age 13 a new ego crisis begins.

There is a struggle between the tendency for repression and the emergence of dynamic needs.

The changes in reactions in the four analyzed factors correspond fully with the theoretical expectations based on our knowledge of child development and on the theoretical assumption that the specific psychological meaning of the four needs is a main factor determining test behavior.

OTHER PROBLEMS CONNECTED WITH THE SPECIFIC STIMULUS VALUE OF THE PICTURES

We have reached the conclusion that three factors determine the stimulus value of a picture:

1. The psychological meaning of the need factor which is represented by the picture. This is the only factor considered by the current method of interpretation.

2. The specific meaning which the picture has for a larger group of subjects. This is the "popularity dimension" of the picture.

3. We assume that the personal association value of each picture is determined by personal experience and situational circumstances during the testing period.

We will discuss now to what extent the neglect of factors 2 and 3 may invalidate test interpretation. We must consider especially whether the combination of other pictures in a new way would yield new factors without which test behavior would not be adequately explained.

Szondi believes that each psychological trait is composed of several basic components, since it is determined by the interaction of basic human needs. It is not important, for the sake of interpretation, whether these needs are hereditarily determined or socially conditioned. The important assumption is that certain needs are manifested in some way in every human being. Szondi claims that, although theoretically his need system may be incomplete, no suggestions made to him to expand this system met his basic criteria and all proved to be combinations of other needs. For example, the association experiment might demonstrate that some pictures of different factors evoke associations in the field of competition. The need for competition seems to be basic in our civilization. But it would be superfluous to combine these pictures into one scoring category for interpretation purposes. We would infer the dominance or absence of this need by the general constellation of the profile (p+, d+: the main syndrome). The introduction of a new factor into the system would be practical and reasonable only if this factor were to represent a basic need which could be broken up into components of the present system. *The main value of the test consists in the attempt to analyze the interaction of basic human needs.*

Some pictures evoke associations in two Szondi factors. These pictures have, for example, not only a "d" value, but a "p" value too. If a thorough association experiment should locate such pictures, they should be eliminated. This brings us to the question of error estimate of the test. The general or personal specific value of the picture may cause a choice which is not representative of the subject's need constellation. But actually only two choices in one direction

are scorable (one choice is scored as 0). It seems that this double choice can seldom be attributed to the specific stimulus value only.

It has been suggested to the author to assign different weights to the pictures, according to their stimulus value. The author does not concur with the trend to overscore projective tests. If parallel research should confirm the findings of this paper and a table of the most frequently chosen pictures with their stimulus value could be published, the psychologist would use this table freely.

He will understand that an h– response composed of hII– and hV– has more weight than a response hI–, hIII–. If a subject rejects hV the reason for this response should be determined.

Summary

The reactions to the Szondi test obtained by three groups of children of different ages and ethnic backgrounds have been analyzed. The reactions to the specific pictures and to the different test factors have been taken into account. The data indicated that there is no significant difference between children from the Middle East and the U.S. in their reactions to the test pictures, but that there are significant differences between the pictures with respect to their stimulus value. Many pictures are clearly liked or disliked. Some pictures attract far more attention than others.

It has been demonstrated that, theoretically, test behavior can be explained according to the need theory of interpretation. It has been suggested that the difference in value between the pictures is an essential condition for the functioning of the test according to the rationale underlying its interpretation.

In spite of the fact that the groups do not differ in their reaction to the single pictures, they differ significantly in their reaction to the test factors. This difference cannot be attributed to cultural differences, because the difference between the two American groups is greater than the difference between the second American group and the Israeli group where the age difference is smaller. The difference between the groups can be attributed to developmental factors and to the need theory.

The statistical loadedness of the factors was examined and brought further evidence that the difference in need-tension is the main factor determining test behavior.

The problem of introducing new scoring categories on the basis of the specific stimulus value of some pictures has been discussed. It has been concluded that for general interpretation purposes such suggestion would be impractical. The data analysis proved that Szondi test reactions are psychologically meaningful in terms of need theory regardless of ethnic background.

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Some Effects of Subject-Examiner Interaction on Projective Test Performance

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This investigation represents an attempt to demonstrate some of the effects of subject-examiner interaction in a projective test situation. The performance of Ss on a projective test when it was self administered and when it was administered by an examiner were compared in order to study these effects experimentally. The Szondi Test was selected for the study because it lent itself most readily to such an experimental design. The question of the validity or nonvalidity of the test itself is another problem and does not appear to be of importance in relation to this particular investigation.

SUBJECTS AND PROCEDURE

Nineteen normal adult females between the ages of 20 and 40 years were invited to participate in a testing experiment. They were told nothing further concerning the nature of the study. Each S was tested at an established time and place for a series of 12 sessions using the Szondi photographs. Strict adherence to standard procedures as set forth by Deri (2, p.9) was observed with the exception that every other session the test was self-administered. Instructions for laying out the cards in proper order and all other essential details of procedure were explained by the examiner at the first session. Subjects were told that in order to save the examiner time they might occasionally be asked to go through the photographs by themselves and that standard procedure was essential. The examiner made certain that each S understood the directions. Subjects were also instructed to choose photographs liked or disliked at the particular moment and it was emphasized that this was not a test of memory. In the self-administered series S at no time saw the examiner; the test was left in a regular place and if the examiner was not there S administered the test to himself leaving the two piles of "likes" and "dislikes" for the E to record later.

Care was taken to avoid giving the Ss any knowledge concerning the nature of the test. The photographs were placed in a compartmentalized box with a plain cover and the name of the test on the back of each card was covered with a gummed label. Very few of the Ss had taken a course in psychology and none had had a course within the previous six years.

This experimental design was chosen for the following reasons. Deri (2, p.14) suggests a minimum of six, preferably ten profiles for a complete study. It was felt that if one adhered to a twelve session limit (in order to have a minimum of six profiles for each condition) any radical change in interpretation of profiles occurring within that testing unit might be considered due to the type of administration of the test and not to major changes in the need systems of the Ss. Since, according to the author, the test reflects personality as an ever-changing process, the latter might conceivably be the case if S first had 12 sessions with the E followed by 12 self-admini-

stering sessions and there were no overlap in the examination periods.

Therefore, the six examiner-administered profiles and the six self-administered profiles for each S have been treated as separate units and scored according to the standard directions. In this way 38 six-session profile series were obtained, 19 series for each condition.

Results

Comparisons were made between all numerical diagnostic formulae resulting from the scoring of the profile series for the two conditions. Since Deri (2) mentioned changes in choice reactions occurring from one session to the next as differentiating self-administered from examiner-administered profiles, the consistency of reactions to the individual photographs was investigated for the two series. To get a measure of the constancy of selection the Szondi Instability Score (SIS) as developed by David and Rabinowitz (1) was used. All the differences were tested with the t test of significance using the formula for matched pairs to find the standard error of the difference (3).

The symbolic expressions of the "instinct class" were also compared for the two series. Since Szondi considers the "instinct class" the key to the total personality these symbols should be identical for each S unless self-administration affected the results in some way.

When the t test was applied to differences in SIS scores a value significant at the .005 level of significance was obtained. (Table I) That is, the Ss were more likely to respond to the individual photographs the same way each session when they administered the test to themselves than when it was administered by the examiner. Possible reactions to a photograph were to select it as liked, disliked, or to ignore it; with the examiner opinions changed from like to dislike or from ignoring a photograph to selecting it more often than when Ss administered the test to themselves.

There was no significant difference in the number of open reactions occurring under the two conditions. The t value found for differences in the number of plus-minus reactions was significant at the .02 level of confidence (Table I). The profiles, then, showed more ambivalent factors when Ss administered the test to themselves. The "tendency tension quantity" (the sum of the open and plus-minus reactions) was greater for the self-administered test with a t significant at the .04 level of confidence.

According to Deri (2), the ratio between the total open reactions and total plus-minus reactions which is called the "quotient of tendency tension" differentiates between individuals who tend to exhibit control over their behavior and those who tend to act out their needs. There was no significant difference between these quotients for the two profile series. When the "instinct class" symbols were compared it was found that they were similar in the two series for 10 Ss and different for 9 Ss.

Summary and Conclusions

Nineteen normal adult females took the Szondi test under two conditions; one in which they administered the test to themselves and the other in which they were tested by an examiner. When profiles for the two series were compared the following results were noted: (1) the Ss were more consistent in their reactions to the individual photographs when the

TABLE I—Differences Between Diagnostic Formuli Obtained In Scoring

	Self-Administered		Examiner-Administered		Difference		
Formula	Mean	SD	Mean	SD	Mean	σM_d	t
SIS	45.10	26.75	62.79	32.79	—17.69	5.39	3.28*
Total plus-minus	6.84	2.39	5.63	2.83	1.21	.45	2.69**
Open & plus-minus	17.78	5.74	16.16	4.97	1.62	.72	2.25***

*Significant at the .005 level of confidence (df=18).
**Significant at the .02 level of confidence (df=18).
***Significant at the .04 level of confidence (df=18).

test was self-administered, (2) the Ss showed more plus-minus reactions when the test was self-administered, (3) the sum of the open and plus-minus reactions was greater when the test was self-administered. All these differences were significant beyond the .04 level of confidence.

There was no significant difference between total open reactions and quotients of "tendency tension" obtained under the two conditions. "Instinct class" symbols were the same in both series for 10 of the Ss and different for 9 Ss.

Contrary to Deri's findings, evidence from this study indicates that Ss were more likely to show sudden changes in their reactions to the photographs when the test was administered by the examiner. It could be argued that the changes were not as sudden as they appeared since sessions being compared were two days apart. However, this factor was constant for both conditions and significant differences in SIS scores were found. Also it probably frequently happens that a profile series is administered in sessions occurring every other day at the clinician's office and scoring procedures must have been established using many cases in which this was true.

Since no diagnosis of the individual profiles was attempted, the effect of the differences noted on the interpretation of the test has not been determined. When significant changes were shown in diagnostic formulae the writer assumes they would affect the profile diagnosis. Results of this investigation have in no way established whether the self-administered or the examiner-administered test presents the "truer" picture of the personality. Nor have any conclusions been reached concerning reasons the examiner's presence should affect the individual's reactions to the photographs. However, it is concluded that the presence of the examiner did influence Ss responses and a few directions in which that effect seemed to operate in this group of Ss have been pointed out. The dynamics of subject-examiner interaction in any projective test situation is an intriguing topic. Determining whether such effects could be experimentally demonstrated seemed an essential prerequisite to further study of this problem.

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GENERAL NEWSLETTER

Boisson, G. La elaboracion perceptiva en los no inteligentes. Revista de Psicologia general y aplicada. 1953, 7, 217-236. (Madrid)

Rorschach protocols of 100 men of below-average intelligence were examined for indications of perceptual organization characteristic of intellectual deficit.

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Rorschach quantitative data on a variety of organic brain damage cases are presented with an attempt to relate Rorschach findings to area of cortical involvement.

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Greppi Sandino, A. Investigacion sobre los determinantes indicativos de inteligencia en el test de Rorschach. Revista de Psiquiatria y disciplinas conexas. 1952, 16, 108-128. (Santiago)

Statistical examination of Rorschach variables in relation to intelligence.

Schachter, M. and Cotte, S. Contribution a l'etude des correlations unissant le quotient intellectuel (QI) aux donnees du test de Rorschach. Giornale di Psichiatria e di Neuropatologia. 1953.

Rorschachs administered to groups of children at three intelligence levels reveal positive correlations of intelligence and W, M, FM, At%, Popular %, Original %, and the ratio of W to D.

Cotte, S. Etude statistique sur les interpretations globales (G) dans le test psychologique de Rorschach. Giornale di Psichiatria e di Neuropatologia. 1953.

Rorschachs were administered to 300 children from 7 to 11 years of age. Sex and age differences are indicated in the use of W in conjunction with specific content categories and card pull.

Schachter, M. and Cotte, S. L'arrieration Mongolienne. Marseille; Comite de L'Enfance Deficiente, 1951.

This is a statistical study of 105 cases of mongolism based upon evaluation of biologic and social backgrounds amplified by Binet-Simon examinations and seven Rorschachs. Protocols are included.

THE TAT NEWSLETTER

VOL. VIII, No. 1 March, 1954

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Annual Bibliographic Issue: The 1953 supplement to the cumulative TAT bibliography is presented in this issue of the *Newsletter*. In all, 143 references are cited. With the thought that our readers might be interested in the sources for this compilation, the following information is given: All of the 1953 issues of twenty-three journals are perused page by page for references to the TAT and closely allied techniques. These journals include nine of the ten APA journals – all except the *Journal of Comparative and Physiological Psychology*–and the five Journal Press periodicals edited by Carl Murchison. The other nine journals examined are the *American Journal of Psychiatry, American Journal of Orthopsychiatry, Educational and Psychological Measurements, Excerpta Medica: Neurology and Psychiatry, Current List of Medical Literature, Journal of Clinical Psychology, Journal of Educational Psychology, Journal of Personality,* and *Journal of Projective Techniques.* Three of the above journals are useful for finding foreign references, for double-checking domestic references and for picking up the occasional reference not published in any of the journals examined directly. These three are the *Psychological Abstracts,* the "Projective Techniques" section of the *Current List of Medical Literature,* and the "Mental Test" section of *Excerpta Medica: Neurology and Psychiatry.* The first two, especially, would seem to be indispensable aids for bibliographic research on the TAT.

Of the 37 references cited in Section VII, "Unpublished References", below, thirty-two are reproduced with permission from the "Bibliography of Unpublished Research on the Rorschach and TAT" compiled by the Committee on Diagnostic Devices of the Division of Clinical and Abnormal Psychology of the APA. These unpublished researches are discussed in a 1953 Division Newsletter; the complete Rorschach and TAT bibliography of unpublished researches is available from the Division Secretary, Dr. Ann Margaret Garner, 5728 Ellis, Chicago 37, Illinois. We wish to express our appreciation to Dr. Garner and to the Division for permission to reproduce the references to unpublished TAT research.

The TAT bibliography presented hereinafter is organized as it has been in previous years except that the scope of some of the categories has been broadened. The reference for the scheme of the bibliography, described by Robert Holt, is *Journal of Projective Techniques,* 1951, *15,* 117-123. The current box-score, based on the 96 references in Sections I through V of the bibliography is as follows:

Year	No. Found At Time of First Report	No. Found To Date
1935-45	88	90
1946	33	35
1947	44	47
1948	52	57
1949	46	62
1950	53	83
1951	76	99
1952	56	81
1953	69	

When the 96 items of published

TAT research in the 1953 Supplement are divided by year of origin, the distribution is as follows: 1953, 69; 1952, 25; and 1951, 2. If one keeps in mind the fact that the references for the year just completed are incomplete, one can expect the 1953 score to be over one-hundred when the foreign and obscure domestic references are reported next year. (Judging from past *TAT NL* statistics, the number of references for the latest year reported eventually increases one-fourth to one-half). There is no question but that the number of studies using the TAT is continuing to increase.

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ANNOUNCEMENTS

WORKSHOPS

Chicago, Illionois

The Department of Psychology, University of Chicago, announces two workshop seminars in the Rorschach Test, July 6-10, 1954, and July 12-16, 1954, (inclusive). These will be conducted by Dr. S. J. Beck.

WORKSHOP I, Basic Processes, will provide a grounding in fundamentals. The procedure in obtaining the test record will be discussed. Representative responses will be illustrated, their scoring clarified, with especial reference to their inter-relations in shaping the whole personality structure. Introduction to interpretation.

WORKSHOP II, Advanced Clinical Interpretation, will consider the ego, anxiety, and the individual's psychological reserves as treatment potential. The cases will illustrate "schizogenic" conditions in children, and some milder disorders in children and adults. They will exemplify anxiety of "central" (inner) source, as well as of peripheral stimulation. In exploring for reserves, both structure and content will be scrutinized.

Workshop I may be taken by students at, or ready for, the interne level. Admission to Workshop II is limited to psychologists and psychiatrists in clinical positions or practice. Each seminar will meet at the University for five days, with two sessions each day, two hours per session.

For all information as to admission, fees, or academic credit arrangements, write to the Executive Secretary, Department of Psychology, The University of Chicago, Chicago 37, Illinois.

Cleveland, Ohio

Marguerite Hertz, Ph.D., Associate Clinical Professor of Psychology, Western Reserve University, will give three workshops in the Rorschach Method.

WORKSHOP I: Introduction to the Rorschach Method, June 14-18 inclusive. All day sessions, one evening session, demonstrations in the hospitals, supervised training periods.

WORKSHOP II: Intermediate course in the interpretation and clinical application of the Rorschach Method, June 21-25 inclusive. All day sessions, one evening session. Lectures, demonstrations in the hospitals, supervised training periods. Students in Workshop I, may continue with Workshop II.

WORKSHOP III: Advanced course in the interpretation of Rorschach records of various personality and clinical groups. Participants may submit records for study, June 28-July 2 inclusive. All day sessions, one evening session.

Fee: $40.00 for each workshop.

Credit: One credit per workshop if desired upon registration and presentation of transcript of college record.

Application: Inquiries may be made to

Dr. Marguerite R. Hertz
Psychological Laboratory
Western Reserve University
Cleveland 6, Ohio

Estes Park, Colorado

A clinical psychology workshop will be offered at Estes Park from Monday, June 14 through Saturday noon, June 26. The staff will include Walter G. Klopfer, Ph.D.,

Chief Psychologist, Norfolk State Hospital, School Psychologist, Norfolk Public Schools, Assistant Professor of Medical Psychology. University of Nebraska College of Medicine; Herbert H. Humphreys, Ph.D., Clinical Psychologist and Acting Director, Children's Service, Nebraska Psychiatric Institute, Assistant Professor of Medical Psychology, University of Nebraska College of Medicine; Earl S. Taulbee, Ph.D., Assistant Chief Psychologist, Norfolk State Hospital.

FEE: Tuition for one week is $40. For two weeks is $65.

Courses: Courses will include Use of Projective Techniques with Children; Techniques of Play Therapy; Case Integration Seminar; Introduction to the Rorschach Test; Survey of Projective Techniques; Advanced Seminar in Rorschach Test; Theories and Techniques of Psychotherapy with Adults.

Application: Inquire of
Dr. Walter G. Klopfer
Box 902
Norfolk, Nebraska

REGIONAL REPORTS

Montreal Division

Herbert Dorken reports that the Montreal Division of the Society sponsored a joint program with the Psychological Association of the Province of Quebec at their annual meeting November 27 and 28. Dr. John E. Bell presented two papers, one on "Family Group Therapy: A New Method of Treatment for Older Children and Their Parents," and the other on "The Nature of Projective Techniques" on November 27. On November 28 several symposia were held in which members of the Montreal Group participated.

Philadelphia Division

The program for the year 1953-1954 includes the following:

October 30 and 31: Seminar by Zygmunt A. Piotrowski, Ph.D., New York State Psychiatric Institute.

January 29, 1954. Case Presentation by M. Eleanor Ross, M.A., Norristown State Hospital and Marguerite R. Saltzman, M.A., Institute of the Pennsylvania Hospital.

February 26 and 27: The Theory of Thinking, Psychodynamics, and Test Rationale by David Rapport, Ph.D., Austen Riggs Center.

March 26: The Usefulness of Anxiety in Psychiatry by Otto A. Will, M.D., Chestnut Lodge.

April 30: The Impact of Projective Techniques on Basic Psychological Science, by Samuel B. Kutash, Ph.D., President, Society for Projective Techniques and Rorschach Institute.

Advance registration is required. Inquire of Dr. Dorothy K. Hallowell, 3318 Midvale Avenue, Philadelphia 29, Pa.

Northern California Division

MEETINGS AND PROGRAMS
1952-1953

October 16, 1952, Speaker: Robert E. Harris, Ph.D., Topic: Some Recent Studies in the Psychodynamics of Hypertension.

December 4, 1952, Speakers: Olga Bridgman, M.D., Ph.D., Arthur Burton, Ph.D., Thomas A. Gonda, M.D., Topic: Intracranial Pathology as Observed Through Psychological Tests.

March 5, 1953, Speaker: Starke R. Hathaway, Ph.D., Topic: Does Clinical Intuition Exist?

July 30, 1953, Speaker: O. Hobart Mowrer, Ph.D., Topic: Research in Psychotherapy.

December 3, 1953, Speaker: Robert R. Sears, Ph.D., Topic: Identification in Young Children.

The following names have been nominated for officers and members of the council with elections to be held the evening of December 3, 1953:

Chairman:	Suzanne Reichard
Secretary-Treasurer:	Merle H. Elliott
Council:	Robert E. Harris (retiring chairman)
	Paul S. Spitzer
	George Muench
	Jane Hamilton Ranzoni

Rocky Mountain Division

Lawrence Rogers reports that plans are being made to include papers on projective techniques in the forthcoming meeting of the Rocky Mountain Psychological Association. Due to the small number of members of the Society in the area, it is not feasible to organize separate meetings. However, efforts are being made to interest eligible candidates in joining the Society.

CALL FOR PAPERS

Fifteenth Annual Meeting of the Society for Projective Techniques and Rorschach Institute

The Program Committee of the Society for Projective Techniques is announcing a call for papers for the 1954 annual meeting which will be held in conjunction with the meetings of the American Psychological Association in New York. As in previous years, several of the events planned by the Society will be sponsored jointly by Division 12 of the APA and the Society.

The Program Committee is tentatively considering a program that will consist of several events:

(a) Individual reports of research involving projective techniques.
(b) Case conference workshops limited to small groups.
(c) Symposia on technical problems involving projective techniques.
(d) A visual aid program involving projective techniques.
(e) An address by the President of the Society.

The Program Committee invites suggestions from all interested psychologists on other programs involving projective techniques that may be developed.

The present call for papers is to invite reports of research that will elucidate two critical problems in present-day psychology: (1) Sex differences (2) Normal personality. It is planned to have one session devoted to each of these topics. Psychologists who have been or are now engaged in research utilizing projective techniques in the study of *sex differences* or *normal personality* are invited to present their research at this convention of the Society.

Psychologists wishing to present research on these two topics must submit abstracts to Jules D. Holzberg, Connecticut State Hospital, Middletown, Connecticut by May 15. Abstracts should not exceed 300 words and should be submitted in triplicate on 8½x11 paper. The abstract should indicate the problem, subjects, procedure, results and conclusions.

All papers accepted for the program are the property of the Society unless released.

Program Committee
Mortimer M. Meyer
L. Joseph Stone
Jules D. Holzberg, *Chairman*

LIST OF MEMBERS AND FELLOWS OF THE SOCIETY FOR PROJECTIVE TECHNIQUES AND RORSCHACH INSTITUTE, INC., AS OF MARCH 1, 1954

Date preceded by M indicates date elected to membership.
Date preceded by F indicates date elected to fellow status.
Date preceded by St. Aff. indicates date elected as student affiliate.
Date preceded by Aff. indicates date elected as affiliate.

AALTO, Ensio E.
Box 22
University Station
Minneapolis 14, Minn. M 1950

ABBATE, Grace McLean (M.D.)
9 Garden Place
Brooklyn 2, N. Y. M 1941

ABEL, Theodore Mead (Ph.D.)
Palisades M 1944
Rockland County, N. Y. F 1945

ABERLE, David F.
Department of Sociology
University of Michigan
Ann Arbor, Mich. M 1944

ABRAMS, Elias N. (Ph.D.)
Brooklyn Regional Office
Veterans Administration
250 Livingston Street
Brooklyn 1, N. Y. M 1952

ABRAMS, Ray H. (Ph.D.)
408 S. Lansdowne Avenue
Lansdowne, Pa. M 1950

ABRAMSON, Leonard S. (Ph.D.)
1 Marshall Street
Irvington, N. J. M 1948

ABT, Lawrence Edwin (Ph.D.)
151 Rockland Avenue
Larchmont, N. Y. M 1951

ACKERMAN, Bernard
124 East 91st Street
New York 28, N. Y. M 1943

AINSWORTH, Mary D. (Ph.D.)
Tavistock Clinic
2 Beaumont Street M 1948
London, W. 1. F 1950

ALCOCK, Theodora
Central Middlesex Group
Hospital Management Committee
Tavistock Clinic
2 Beaumont Street M 1950
London, W. 1. F 1953

ALDEN, Priscilla
1963 W. Broad
Columbus, Ohio M 1949

ALEXANDER, Robert
516 Jordan Street
Jacksonville, Ill. M 1950

ALLEN, Barbara M.
Department of Psychiatry
Allan Memorial Institute
1025 Pine Ave. W.
Montreal, Quebec M 1953

ALLEN, Doris Twitchell (Ph.D.)
30 W. Fountain Avenue
Glendale, Ohio M 1949

ALLEN, Robert M. (Ph.D.)
Department of Psychology
University of Miami M 1949
Miami, Fla. F 1951

***ALOZERY, Jessie Jervis (Ph.D.)**
228 East 57th Street
New York 22, N. Y. F 1940

ALVARADO, Lois Bellinger de, (M.D.)
88 Morningside Drive
New York, N. Y. M 1949

AMCHIN, Abraham
State School
(near Warwick), N. Y. M 1952

AMES, Mrs. Louise Bates
Gesell Institute of Child Development
310 Prospect Street
New Haven 11, Conn. M 1951

ANASTASIO, Mary M.
117 West 13th Street
New York 11, N. Y. M 1952

ANDERSON, Dorothy V. (Ph.D.)
3250 Laurel Canyon Blvd.
N. Hollywood, Calif. M 1953

ANDERSON, Helen Joan
653 East 17th Street
Brooklyn 30, N. Y. M 1949

APPELL, Melville
Rehabilitation Center of
Summit County
326 Locust Street
Akron 2, Ohio M 1950

ARMON, Mrs. Mary Virginia
470 West Avenue 43
Los Angeles 65, Calif. M 1946

ARONSON, Mrs. Margaret R.
c/o Lt. Morton J. Aronson
U.S.N. Hospital
St. Albans, L. I., N. Y. M 1948

ARONSON, Marvin L. (Ph.D.)
531 East Lincoln Avenue
Mt. Vernon, N. Y. M 1951

*Asterisk preceding name indicates charter member or charter fellow.

AUERBACH, Mrs. Aline B.
105 East 53rd Street
New York 22, N. Y. M 1944

BACHRACH, Arthur J. (Ph.D.)
Department of Neurology
and Psychiatry
University of Virginia Hospital
Charlottesville, Va. M 1950

BAKER, Corinne F. (Ph.D.)
1839 Farmington Road
East Cleveland 12, Ohio M 1943

BAKER, Mrs. Gertrude
2726 Montana Avenue
Santa Monica, Calif. M 1948

BALKEN, Eva Ruth (Ph.D.)
906 Hill St.
Latham Park Manor
Greensboro, N. C. M 1948

BALL, Josephine (Ph.D.)
P. O. Box 616
Loudonville, N. Y. M 1949

BARBARA, Peter Paul
Box W
Newtown, Conn. M 1952

BARKLEY, Bill J. (Ph.D.)
1481 Warrensville Center Rd.
Cleveland 21, Ohio M 1950

BARNETT, Irving (Ph.D.)
419 West 119th Street
New York 27, N. Y. M 1950

BARON, Louis K.
6238 North Tenth Street
Philadelphia 41, Pa. M 1951

BARON, Samuel (Ph.D.)
39-45—47th Street
Long Island City 4, N. Y. M 1944

BARRATT, Mrs. Emily C.
Psychological Service
111 N. 49th Street
Philadelphia 39, Pa. M 1952

BARRELL, Robert P. (Ph.D.)
VA Hospital
1601 Perdido Street
New Orleans, La. M 1952

BARRINGER, Benton E. (Ph.D.)
138 Fort Hill Avenue
Canandaigua, N. Y. M 1951

BARRY, John R. (Ph.D.)
USAF School of Aviation Medicine
Randolph Air Force Base
Randolph Field, Texas M 1953

BARTLETT, Mrs. Doris A.
924 West End Avenue
New York, N. Y. M 1949

BAUER, Johanna R. Goldsmith
831 Oeste Drive
Davis, Calif. M 1945

BEALE, Elizabeth
941 Indiana
Lawrence, Kansas M 1951

BEAUCHEMIN, Jean M.
10793 Esplanade
Montreal 12, Canada M 1952

BECK, Samuel J. (Ph.D.)
Department of Psychology
University of Chicago
Chicago 37, Ill. F 1950

BELL, John E. (Ed.D.)
Putnam Road M 1949
Holden, Mass. F 1951

BELLAK, Leopold (M.D.)
1160 Fifth Avenue M 1948
New York 29, N. Y. F 1952

BERAN, Marianne (Ph.D.)
V. A. Hospital
Lyons, New Jersey M 1949

BERLINER, Anna (Ph.D.)
Pacific University
Forest Grove, Oregon M 1954

BERNSTEIN, Mrs. Hilde R.
5470 Hydepark Blvd.
Chicago 15, Ill. M 1953

BERNSTEIN, Mrs. Mildred R.
2084 Smith Street
Merrick, L. I., N. Y. M 1950

BILLIG, Otto (M.D.)
Department of Neuropsychiatry
Vanderbilt University Hospital
Nashville, Tenn. M 1941
F 1950

***BILLINGS, Edward G. (M.D.)**
1820 High Street
Denver 6, Colo. F 1940

BLESSING, Harold D. (Ph.D.)
308 South Howry
Boise, Idaho M 1953

BLOCH, Mrs. Beatrice
14 Soundview Avenue
White Plains, N. Y. M 1946

BLUM, Lucille Hollander (Ph.D.)
600 West 116th Street
New York, N. Y. M 1947

BLUMSTEIN, Mrs. Molly G.
5219 Wayne Avenue
Philadelphia 44, Pa. M 1948

BOGARDUS, Helen (Ed.D.)
323 14th Avenue North
Seattle 2, Wash. M 1949

BOLES, Glen
140 Riverside Drive
New York 24, N.Y. St. Aff. 1953

BONDEL, Mrs. Gertrude
2049 McGraw Avenue
New York 62, N.Y. St. Aff. 1953

BORSTELMAN, Lloyd J. (Ph.D.)
Psychology Department
Duke University
Durham, N. C. M 1950

BOURKE, William T. (Ph.D.)
VA Mental Hygiene Clinic
333 St. Charles Street
New Orleans, La. M 1950

BOWEN, Barbara
235 West Apsley Street
Philadelphia 44, Pa. M 1953

•BRADWAY, Katherine P. (Ph.D.)
41 Monte Mar Drive M 1940
Sausalito, Calif. F 1949

BRANDON, Grace H.
Court House Annex
Chambersburg, Pa. M 1950

BRANDT, Rudolph J. (Ph.D.)
Psychiatric Clinic of
Beverly Hills, Calif.
450 North Bedford Drive
Beverly Hills, Calif. M 1950

BRAUN, Mrs. Roslyn R.
170-15 Highland Avenue
Jamaica Estates 3, N. Y. M 1949

BRECHER, Sylvia
1014 Gerard Avenue
New York 52, N. Y. M 1951

BRIDGMAN, Olga (M.D.)
Medical School
University of California M 1941
San Francisco, Calif. F 1949

BRODIE, Mrs. Dorothy B.
4833 10th Avenue N. M 1943
St. Petersburg, Fla. F 1950

BRODY, Abraham (Ph.D.)
410 Central Park West
New York 25, N. Y. M 1952

BRODY, Gertrude Gillenson, (Ph.D.)
410 Central Park West
New York 25, N. Y. M 1948

BROOMHEAD, Elizabeth
5350 42nd Pl., N.W.
Washington 15, D. C. M 1944

•BROSIN, Henry W. (M.D.)
University of Pittsburgh
Western Psychiatric Institute
and Clinic
3811 O'Hara Street
Pittsburgh 13, Pa. F 1940

BROUGHAM, Norma
441 King Street
London, Ontario M 1953

BROWER, Daniel (Ph.D.)
300 N. Mountain Avenue M 1943
Upper Montclair, N. J. F 1954

BROWER, Mrs. Judith
300 N. Mountain Avenue
Upper Montclair, N. J. M 1948

BROWN, Fred (Ph.D.)
Mt. Sinai Hospital
100th St. and 5th Avenue M 1948
New York, N. Y. F 1950

BROWN, Martha
10 Kulp Court
Battle Creek, Mich. M 1948

BROWNFAIN, John J. (Ph.D.)
1935 Burlingame Avenue
Detroit 6, Mich. M 1954

BROZOVICH, Stanley M.
449 E. Pine
Altadena, Calif. M 1953

BRUCE, Martin M. (Ph.D.)
71 Hanson Lane
New Rochelle, N. Y. M 1952

BRY, Mrs. Mae G.
59 West 12th Street
New York 11, N.Y. M 1954

BUCK, John N.
1600 Langhorne Road
Lynchburg, Va. M 1950

BUCKLE, Donald F. (D.P.M.)
61 Collins Street
Melbourne, Australia M 1942

BUHLER, Charlotte (Ph.D.)
1127 N. Sweetzer M 1943
Los Angeles 46, Calif. F 1951

•BURCHARD, Edward M. L. (Ph.D.)
55 East 86th Street
New York 28, N. Y. F 1940

BURGEMEISTER, Bessie B. (Ph.D.)
Neurological Institute
710 West 168th Street M 1942
New York 32, N. Y. F 1947

BURTON, Arthur (Ph.D.)
2251 Boxwood Drive
San Jose, Calif. M 1949

CALABRESI, Renata (Ph.D.)
360 Central Park West M 1944
New York 25, N. Y. F 1950

CALIGOR, Leopold (Ph.D.)
300 West 109th Street
New York 25, N. Y. M 1952

CALVERT, Margaret
Verdun Protestant Hospital
P. O. Box 6034
Montreal, Quebec M 1952

CAMPION, John Neil, Jr.
Stockton State Hospital
Stockton, Calif. M 1952

CANTAROW, Mrs. Elizabeth S.
2033 De Lancey Street
Philadelphia 3, Pa. M 1950

CANTER, Aaron H. (Ph.D.)
2939 N. 47th Street M 1949
Phoenix, Ariz. F 1952

•CARO, Mrs. Elizabeth R.
2014 Grove Avenue
Richmond, Va. M 1940

CARPENTER, Kenneth E.
Duddley Hill
Dudley, Mass. M 1953

CARR, Arthur C. (Ph.D.)
Creedmoor State Hospital
Station 60, Queens
Village 27, N.Y. M 1953

•CARROLL, Clara
Bureau of Child Guidance
117th St. and 1st Ave.
New York 35, N. Y. F 1940

CARSON, Marjorie
The Toronto Children's Aid Society
32 Isabella Street
Toronto 5, Canada M 1952

CARTER, Linda Louise
1115 Wertland Street
Charlottesville, Va. M 1949

CARTWRIGHT, Robert W. (Ph.D.)
832 Cummins Street
Roseburg, Oregon M 1952

CASSEL, Russel N. (Ed.D.)
304 Hesse Avenue
Scott AFB, Ill. M 1954

CEASE, Eugene
Box 234
Warren State Hospital
Warren, Pa. M 1951

CHAMOULOUD, Mrs. Muriel I.
607 Euclid Avenue
Elmira, N. Y. M 1945

CHAREN, Sol
200 Rhode Island Ave., N. E.
Washington 2, D. C. M 1949

CLAPP, Chester D. (Ph.D.)
19785 Westbrook
Detroit 19, Mich. M 1954

•CLAPP, Mrs. Hazel S.
18 W. Micheltorena Street
Santa Barbara, Calif. M 1940

CLAUSS, Helen
414 E. Front Street
Danville, Pa. M 1951

CLERK, Mrs. Gabrielle Brunet
3877 Maplewood Ave.
Montreal, Quebec, Canada M 1949

COHEN, Mrs. Mathilde Weill
46 East 91st Street
New York 28, N. Y. M 1942

COHEN, William J. (Ph.D.)
37 Colonial Park Dr.
Springfield, Pa. M 1951

•COHN, Frederick (M.D.)
77 Market Street
Rhinebeck, N. Y. M 1940

COHN, Mrs. Ruth C.
6 West 87th Street
New York 24, N. Y. M 1946

COLE, Joseph Carl (Ph.D.)
1050 So. Masselin Avenue
Los Angeles 19, Calif. M 1949

COLM, Hanna (Ph.D.)
3 Overhill Road
Falls Church, Va. M 1944

COOK, Philip H. (Ph.D.)
Department of Labour
and National Service
Swanston Street
Melbourne c. 1. M 1941
Victoria, Australia F 1949

•COWIN, Marion
416 West 20th Street
New York 11, N. Y. F 1940

COX, Grace B.
1531 N. Second St.
Harrisburg, Pa. M 1950

COX, Rachel Dunaway (Ph.D.)
503 Walnut Lane M 1950
Swarthmore, Pa. F 1952

CRAMER, Fern Joy
1025 Pine Ave. W.
Montreal, Canada M 1951

CRILE, Mrs. Mary
Box 1083
Carmel, Calif. M 1945

CROVETTO, Lorraine
703 Carondelet Street
New Orleans 12, La. M 1953

CUNNINGHAM, Mrs. Cornelia
100 Chesney Lane
Philadelphia 18, Pa. M 1950

DAVENPORT, Beverly (Ph.D.)
Box No. 26
Spadra, Calif. M 1949

DAVID, Henry P. (Ph.D.)
Western Psychiatric Institute
University of Pittsburgh
Pittsburgh 13, Pa. M 1953

DAVIDSON, Mrs. Alene
280 Melbourne Road
Great Neck, N. Y. M 1953

•DAVIDSON, Helen H. (Ph.D.)
425 Riverside Drive
New York 25, N. Y. F 1940

DAVISON, Arthur H. (Ph.D.)
8844 Watertown Plank Rd. M 1952
Milwaukee 13, Wisc. F 1953

DERI, Mrs. Susan K.
380 Riverside Drive M 1948
New York 25, N. Y. F 1950

DERNER, Gordon F. (Ph.D.)
Department of Psychology
Adelphi College M 1949
Garden City, N. Y. F 1951

DE VAULT, Helen C.
593—33rd Street
Manhattan Beach, Calif. M 1949

DE VILLIERS, David Z.
University College
Fort Hare, Union of
South Africa M 1953

DIAMOND, Mrs. Florence
135 Sierra View Road
Pasadena 2, Calif. M 1950

DIAMOND, Mrs. Gertrude S.
1328 Sage Street
Far Rockaway, N. Y. M 1948

DIANA, Pearl Butler (Ph.D.)
P. O. Box 87 M 1949
Gary, Indiana F 1951

DINGMAN, Paul R. (Ph.D.)
Child Guidance Center
400 Garver Bldg.
Des Moines, Iowa M 1950

DOMINGUEZ, Kathryn (Ph.D.)
Child Psychiatric Clinic
335 Franklin Avenue
Scranton, Pa. M 1943

DÖRKEN, jr., Herbert (Ph.D.)
Verdun Protestant Hospital
P. O. Box 6034 M 1949
Montreal, Canada F 1951

DOUGHERTY, Mrs. Margaret Ruddy
1804 Roselynn Avenue
Scranton 10, Pa. M 1944

DRYSELIUS, Harold
6605 Hollywood Boulevard
Hollywood 28, Calif. M 1950

DRYZER, Evelyn F.
14861 Sussex
Detroit 27, Mich. M 1953

DUDEK, Stephanie Z.
258 West 22nd Street
New York 3, N. Y. M 1949

DUE, Floyd O. (M.D.)
370—29th Street
Oakland 9, Calif. M 1943

DUFRESNE, Georges
49 Spring Grove Crescent
Outremont, near Montreal
Canada M 1954

DUNLAP, Dorothy
Agnews State Hospital
Agnew, Calif. M 1954

DUNN, Michael B.
207 Midland Ave. M 1941
Wayne, Pa. F 1943

•EARL, C. J. C. (F.R.C.P.I.)
Monyhull Cottage
Monyhull Hall Road
Kings Heath
Birmingham 14, England F 1940

EIDUSON, Mrs. Bernice T.
941 Stonehill Lane
Los Angeles 49, Calif. M 1949

ELDRED, Donald M.
Psychology Department
Vermont State Hospital
Waterbury, Vermont M 1948

ELIZUR, Abraham (Ph.D.)
6 Tel Hai Street
Tel Aviv, Israel M 1949

ELKISCH, Paula (Ph.D.)
707 Westview Street
Philadelphia, Pa. M 1950

ELLIOTT, Merle H. (Ph.D.)
1025 Second Avenue
Oakland 6, Calif. M 1944

ELLIS, Albert (Ph.D.)
Parc Vendome
333 West 56th St.
New York 19, N. Y. M 1950

•EMERY, Margaret
43 Fifth Avenue
New York, N. Y. F 1940

ENOCHS, Neil
366 Marie Avenue
Los Angeles 42, Calif. St. Aff. 1954

EPHRON, Beulah K. (Ed.D.)
40 East 10th Street
New York 3, N. Y. M 1949

EPSTEIN, Hans L. (Ph.D.)
722 West 176th Street
New York 33, N. Y. M 1944

ERICSON, Mrs. Helen
11844 E. Deana Street
El Monte, Calif. Aff. 1954

EVANS, John T. (Ph.D.)
85 Otis Street
Newtonville 60, Mass. M 1951

EVANS, Ray B.
2915 Rimpau Blvd.
Los Angeles 16, Calif. M 1954

EVERETT, Evalyn G.
Box 51
Napa State Hospital
Imola, Calif. M 1953

FARBEROW, Norman L. (Ph.D.)
363 North Curson Avenue
Los Angeles 36, Calif. M 1949

FARLEY, Julie (M.D.)
418 Northway
Baltimore, Md. M 1949

FATERSON, Hanna F. (Ph.D.)
27 Jane Street M 1943
New York 14, N. Y. F 1946

FEHRENBACH, Mrs. Alice R.
181 Magnolia Street
Denver, Colo. M 1951

FEIFEL, Herman (Ph.D.)
Winter General Hospital
Topeka, Kansas M 1943

FEINBERG, Henry
15886 La Salle
Detroit, Mich. M 1949

FELDBERG, Theodore M. (M.D.)
The Johns Hopkins Hospital
Baltimore 5, Md. M 1944

FELDMAN, Dorothy A. (Ph.D.)
School of Medicine
University of Pittsburgh
Pittsburgh 13, Pa. M 1952

FELDMAN, Irving (Ph.D.)
141 N. Riverside Avenue
Red Bank, N.J. M 1953

FERGUSON, Kingsley G.
101 Grand Avenue
London, Ontario M 1954

FERRACUTI, Franco (M.D.)
Istituto di Psicologia
University of Rome
Rome, Italy M 1954

FICHMAN, Lionel L.
1454 Comstock Avenue
Los Angeles 24, Calif. St. Aff. 1954

FIKE, Mrs. Irene A.
271 Nelson Road
Scarsdale, N. Y. M 1941

FINE, Reuben (Ph.D.)
225 West 86th St.
New York 24, N. Y. M 1949

FINN, Michael H.P. (Ph.D.)
3842 Southern Cross Drive
Baltimore 7, Md. M 1954

FISCHER, Liselotte K. (Ph.D.)
484 Woodland Street
Hartford 12, Conn. M 1949

FISHER, Jerome (Ph.D.)
121 Havenside Dr.
San Francisco 16, Calif. M 1950

FISHER, Lillian Jagoda
24 Greenwich Avenue
New York 11, N. Y. M 1949

FONT, Marion McKenzie
627 South Carrollton Ave. M 1942
New Orleans 13, La. F 1947

FORER, Bertram R. (Ph.D.)
2170 E. Live Oak Drive M 1949
Los Angeles 22, Calif. F 1951

FORER, Lucille K. (Ph.D.)
2170 E. Live Oak Drive
Los Angeles 22, Calif. M 1953

FORREST, Mrs. Carol W.
Uniontown, Ala. M 1951

FORTIN, Mrs. Claire Mathieu
1260 Leyden St.
Denver 20, Colo. M 1950

•FOSBERG, Irving A. (Ph.D.)
2700 Calhoun Street M 1940
New Orleans 18, La. F 1949

FOSTER, Austin (Ph.D.)
The Psychopathic Hospital
University of Texas Med. Branch
Galveston, Texas M 1950

FRANCOEUR, Thomas A. (Ph.D.)
1070 Crevier Avenue
Ville St. Laurent, P.Q. Aff. 1954

FRANKEL, Esther B. (Ph.D.)
12937 Woodward
Highland Park 3, Mich. M 1953

•FRANZETTI, Mrs. Rosa Padlina de
"El Silencio" Bloque 6-C-4
Caracas, Venezuela M 1940

FREAR, Edgar
Montrose, Pa. M 1950

FREY, Mrs. Harriet K.
59 Francisco Avenue
West Caldwell, N.J. M 1953

FRIEDMAN, Alice (Ph.D.)
780 Madison Ave.
New York 21, N. Y. M 1951

FRIEDMAN, Mrs. Gladys Miller
2860 Van Aken Blvd.
Cleveland 20, Ohio M 1949

FRIEDMAN, Howard (Ph.D.)
572 East Genesee Street
Fayetteville, N. Y. M 1951

FRIEDMAN, Ira (Ph.D.)
2860 Van Aken Blvd.
Cleveland 20, Ohio M 1954

FRIEND, Mrs. Jeannette G.
16 Greenough Circle
Brookline 46, Mass. M 1949

•FROMM, Erika O. (Ph.D.)
5717 S. Kenwood Avenue
Chicago 37, Ill. M 1940

FRY, Franklyn D.
180 South River Street
Wilkes-Barre, Pa. M 1952

FRY, Martha O.
180 S. River Street
Wilkes-Barre, Pa. M 1952

FUCHSMAN, Seymour H.
225 West 86th Street
New York 24, N. Y. M 1944

FULLER, Paul (Ph.D.)
Florida State University
Tallahassee, Fla. M 1954

GALE, Marian Blewitt
854 So. Euclid
Pasadena 5, Calif. M 1953

GARDNER, Mrs. Ann K.
2427 Roxboro Road
Cleveland 6, Ohio M 1942

GASOREK, Kathryn
30 East Elm St.
Linden, N. J. M 1949

•GAUDET, E. Louise (Ph.D.)
210 West 70th Street
New York 23, N. Y. F 1940

GAUDET, Frederick J. (Ph.D.)
210 West 70th Street
New York 23, N. Y. M 1949

GEIL, George A.
919 Kings Avenue
Springfield, Mo. M 1943

GEIST, Harold (Ph.D.)
2091 California Avenue
Berkeley, Calif. M 1953

GELLES, Herbert M.
295 Wadsworth Avenue
New York 33, N.Y. St. Aff. 1953

•GERING, Mrs. Evelyn
18063 Valley Vista Blvd.
Encino, Calif. M 1940

GERSTEN, Charles (Ph.D.)
New Jersey Neuro-Psychiatric Institute
Skillman, N. J. M 1949

GILBERT, Raymond R.
32 Halifax Street
Jamaica Plain 30, Mass. M 1951

GILLENSON, Gertrude N. (Ph.D.)
See Brody, Gertrude G.

GILLMAN, Mrs. Etta C.
116 Poe Street
Hartsdale, N. Y. M 1944

GOLDFARB, William (M.D.)
720 Riverside Drive M 1941
New York 31, N. Y. F 1944

GOLICK, Mrs. Margaret
944 Dunlap Avenue
Montreal, Quebec M 1953

GONDOR, Mrs. Lily H.
315 East 56th St. M 1949
New York 22, N. Y. F 1952

GOODMAN, Mrs. Carolyn
161 West 86th Street
New York 24, N.Y. St. Aff. 1953

GOODMAN, Morris (Ph.D.)
3 Wellington Road
Livingston, N.J. M 1953

GOOLISHIAN, Harold A. (Ph.D.)
3323 Avenue O (Rear)
Galveston, Texas M 1952

GORDON, Thelma
307 West 11th St.
New York 14, N. Y. M 1951

GOTTLIEB, Lucille S.
225 West 86th Street
New York 24, N.Y. St. Aff. 1953

GOTTLIEB, Mrs. Sophie
225 West 86th Street
New York 24, N. Y. M 1943

GRAHAM, Virginia T. (Ph.D.)
General Hospital—N-3
Cincinnati 29, Ohio M 1953

GRASSI, Joseph R.
Bowman-Gray School of Medicine
Wake Forest College
Winston-Salem 7, N. C. M 1942

GRAVES, Winifred S. (Ph.D.)
227 S. Grant Street M 1948
W. Lafayette, Ind. F 1951

GRAYSON, Harry M.
12640 Oxnard Street
North Hollywood, Calif. M 1951

GRECO, Marshall C.
305 Franklin Avenue
Aliquippa, Pa. M 1944

GREENBERG, Pearl (Ph.D.)
25 West Henry Street
Linden, N. J. M 1951

GREENE, Janet S. (Ph.D.)
65 East 76th Street
New York 21, N.Y. M 1953

GREENSTADT, Pvt. Wm. M.
Div. Surgeon
Hq. Co., 6th Armored Div.
Ft. Leonard Wood, Mo. St. Aff. 1954

GROFF, Marne L. (Ph.D.)
329 W. Ridge Ave.
State College, Pa. M 1952

GROSSMAN, Mrs. Carolyn K.
16950 South Woodland Road
Shaker Heights, Ohio M 1949

GROSSMAN, Searles A. (Ph.D.)
23 Kensington Lane
Brookside, Newark, Del. M 1951

GUERTIN, Wilson H. (Ph.D.)
V. A. Hospital M 1950
Knoxville, Iowa F 1953

GUINDON, Jeannine
39 Ouest Gouin Blvd.
Montreal, Canada M 1951

GUNDLACH, Ralph (Ph.D.)
10 East 76th Street
New York 21, N. Y. M 1951

GUREVITZ, Saul (Ph.D.)
680 West End Avenue
New York 25, N. Y. M 1949

GURVICH, Mrs. Bernice M.
331 West 27th Street
New York 1, N. Y. M 1950

GURVITZ, Milton S. (Ph.D.)
Hillside Hospital
P. O. Box 38 M 1948
Glen Oaks, N. Y. F 1951

GUTMAN, Brigette (Ph.D.)
230 Central Park S.
New York 19, N. Y. M 1949

GUY, William
Springfield State Hospital
Sykesville, Md. M 1953

HABER, William B.
1815 Morris Avenue
New York 53, N.Y. M 1953

HAHN, Albert R.
R.F.D. 2
Westwood, N. J. M 1951

HAINES, Miriam S.
166 Morse Place
Englewood, N. J. M 1951

*HALLOW, William C. (Ph.D.)
2137 Morningside Rd.
Topeka, Kansas M 1940

*HALLOWELL, A. Irving (Ph.D.)
Box 14, Bennett Hall
University of Pennsylvania M 1940
Philadelphia 4, Pa. F 1944

HALLOWELL, Dorothy K. (Ph.D.)
3318 Midvale Avenue
Philadelphia 29, Pa. M 1947

HALPERIN, Sidney L. (Ph.D.)
Bureau of Mental Hygiene
c/o University of Hawaii
Honolulu 14, Hawaii M 1949

HAMMER, Emanuel (Ph.D.)
210 Riverside Drive
New York 25, N.Y. M 1953

HAMMOND, Mrs. Eleanor Buckingham Valley
Bucks County, Pa. M 1947

HAND, Mary Ella
314 W. Maple
Lansing, Mich. M 1948

HANDEL, Gerald
Committee on Human Development
University of Chicago
Chicago 37, Ill. M 1954

HANFMANN, Eugenia (Ph.D.)
17 Dunster Street M 1948
Cambridge 38, Mass. F 1950

HARRIS, Albert J. (Ph.D.)
Educational Clinic
Queens College
Flushing, N. Y. M 1951

HARRIS, June
Bureau of Educational Research
110 Livingston Street
Brooklyn, N. Y. M 1941

HARRIS, Robert A. (Ph.D.)
Psychology Department
Brooklyn College
Brooklyn 10, N. Y. M 1954

HARRIS, Robert E. (Ph.D.)
University of California
Medical School
San Francisco 22, Calif. M 1948

HARRIS, William W.
2894 Grand Concourse
New York 58, N. Y. M 1949

*HARROWER, Molly (Ph.D.)
55 East 86th Street
New York 28, N. Y. F 1940

HARTZLER, Ethel M.
Superintendents Office
Northumberland County
Public Schools
Court House Annex
Sunbury, Pa. M 1951

HASSRICK, Royal B.
935 So. Jackson St.
Denver, Colo. M 1943

HAWKINS, Mrs. Hermione
60 Roble Rd.
Berkeley 5, Calif. M 1951

HAYS, Berta
701 So. Gramercy Dr.
Los Angeles 5, Calif. M 1949

HEISLER, Verda (Ph.D.)
1541 8th Avenue
San Diego, Calif. M 1951

HELLERSBERG, Elisabeth F. (Ph.D.)
641 Whitney Avenue
New Haven, Conn. M 1949

HEMMENDINGER, Larry (Ph.D.)
58 Judd Street
Fairfield, Conn. M 1950

HENRY, William E. (Ph.D.)
5835 Kimbark Avenue
Chicago, Ill. M 1948

HERNESS, Mrs. Christina
Amherst H. Wilder
Child Guidance Clinic
670 Marshall Avenue
St. Paul 4, Minn. M 1952

HERMANN, Katherine F.
115 A Ogden Avenue M 1946
Swarthmore, Pa. F 1950

*HERTZ, Marguerite R. (Ph.D.)
2835 Drummond Road
Shaker Heights, Ohio F 1940

*HERTZMAN, Max (Ph.D.)
Department of Psychology
College of City of New York M 1940
New York, N. Y. F 1946

HIGGINSON, Gordon K. (Ph.D.)
6040 N. Montana
Portland, Oregon M 1954

*HILDEN, Arnold H. (Ph.D.)
628 Clark Ave. M 1940
Webster Groves 19, Mo. F 1943

HILKEVITCH, Rhea R. (Ph.D.)
Roosevelt College
430 So. Michigan Avenue
Chicago 5, Ill. M 1954

*HIRNING, L. C. (M.D.)
62 Waller Avenue
White Plains, N. Y. F 1940

HIRSCH, Mrs. Janet F.
67-49 C 192nd Street
Fresh Meadows 65, N. Y. M 1948

HIRST, Mrs. Carol G.
109 Manor Road
Paoli, Pa. M 1952

HOCH, Erasmus L. (Ph.D.)
Box 425 Union Village
R.D. 3, Plainfield, N.J. M 1954

HOCKER, Mrs. Margaret W.
220 Reily Street
Harrisburg, Pa. M 1951

HOLMES, Frances B. (Ph.D.)
290 Riverside Drive
New York 25, N. Y. M 1950

HOLODNAK, Helen Barbara
31-38—36th Street
Astoria 3, L. I., N. Y. M 1949

HOLT, Robert R. (Ph.D.)
Research Center for Mental Health
104 East 9th St. M 1948
New York 3, N. Y. F 1951

HOLZBERG, Jules D. (Ph.D.)
Box 361
Middletown, Conn. M 1949

HOPKINS, Mrs. Edith D.
2975 Scarborough Road
Cleveland Heights 18, Ohio M 1943

HORLICK, Reuben S. (Ph.D.)
341 James Street
Falls Church, Va. M 1951

HOUCK, Dorothy
135 West 24th Street
New York, N. Y. M 1952

HOUSMAN, Harold S.
1465 Oakland Court
Inkster, Mich. M 1954

HOWARD, J. W. (Ph.D.)
Route 2
Rigaud, P.Q. Canada M 1954

HOWARD, Stephen J.
1044 W. 30th Street
Los Angeles 7, Calif. St. Aff. 1954

HOWE, Mrs. Margaret G.
18 Becher Street
London, Ontario, Canada M 1948

HOWLAND, Allan O.
Adm. Bldg.
State Hospital
Norristown, Pa. M 1951

HUGHES, Robert M. (Ph.D.)
3936 Reading Road N. E.
Rt. 2 M 1944
Chamblee, Ga. F 1954

HUTT, Max L. (Ph.D.)
Department of Psychology
University of Michigan M 1947
Ann Arbor, Mich. F 1952

INMAN, John M.
1530 Arch Street
Berkeley 8, Calif. M 1945

IVES, Margaret (Ph.D.)
Department of Psychology
St. Elizabeths Hospital
Washington 20, D.C. M 1953

JACKSON, Erle L.
C-21 Cheston Apartments
3800 Chestnut Street
Philadelphia 4, Pa. M 1953

JACOB, Zoltan
3155 Rochambeau Avenue
Bronx 67, N. Y. M 1944

JACOBY, Julia
542 Lockerbie Street
Indianapolis, Ind. M 1940

JAHODA, Hedwig (Ph.D.)
420 Central Park West
New York 25, N. Y. M 1952

JANIS, Irving L.
32 Cedarhurst Lane
Milford, Conn. M 1944

JEFFREYS, Alvis W., Jr. (Ph.D.)
South Hill, Va. M 1952

JOEL, Walther (Ph.D.)
1742 Silverwood Terrace M 1946
Los Angeles 26, Calif. F 1950

JOHNSON, Lawrence J.
141 North Linden Street
Harrisburg, Pa. M 1953

JOHNSON, Richard B.
13 Cornelia Street
New York 14, N.Y. M 1953

JOHNSON, Theresa
229 So. Maple Drive
Beverly Hills, Calif. M 1949

JOSEPH, Alice (M.D.)
Garrison-on-Hudson, N. Y. M 1944

JOSEY, William Ernest
1404 Dunlavy
Houston, Texas M 1949

***JUNKEN, Elizabeth M. (Ph.D.)**
468 Lydecker Street
Englewood, N. J. M 1940

KABACK, Goldie Ruth (Ph.D.)
375 Riverside Drive
New York 25, N. Y. M 1950

KADINSKY, D.
8 P. Smolenski Street
Tel Aviv, Israel M 1946

KADIS, Mrs. Asya L.
1060 Park Avenue
New York 28, N. Y. M 1944

KAHN, David F. (Ph.D.)
27 Spring Street
Stamford, Conn. M 1953

KAHN, Major Theodore C. (Ph.D.)
3275 Medical Group
N.P. Section
Parks AF Base M 1953
Pleasanton, Calif. F 1954

KALINKOWITZ, Bernard N. (Ph.D.)
School of Education
New York University
Washington Square,
New York, N.Y. M 1954

KAPIT, Milton E.
1 West 85th Street
New York 21, N. Y. M 1950

KAPLAN, Herbert
805 W. Water Street
Elmira, N. Y. M 1949

KAPLAN, Norman (Ph.D.)
Psychology Department
St. Elizabeth's Hospital
Washington 20, D. C. M 1949

KATES, Solis L. (Ph.D.)
Department of Psychology
University of Oklahoma
Norman, Okla. M 1949

KATZ, Mrs. Florine
88 Central Park W.
New York 23, N.Y. M 1953

KATZ, Mrs. Harriet
190 Riverside Drive
New York 24, N. Y. M 1950

KAUFMANN, Elizabeth M.
414 West 121st Street
New York 27, N. Y. M 1950

*KELLEY, Douglas M. (M.D.)
Bureau of Criminology
Building T-2, Room 120
University of California
Berkeley 4, Calif. F 1940

KELLMAN, Samuel
3269 Lawrence Ave.
Detroit 6, Mich. M 1949

KELSEY, Howard Phelps
1252 Fourth St.
Sarasota, Fla. M 1944

*KEMPLE, Camilla
35 West 58th Street M 1940
New York 19, N. Y. F 1946

KENDIG, Isabelle V. (Ph.D.) M 1944
Ashton, Md. F 1946

KESSLER, Mabel G. (Ph.D.)
Montgomery County Public Schools
Court House
Norristown, Pa. M 1952

KEW, Clifton E.
30 Fifth Avenue
New York 11, N. Y. M 1949

KING, Francis W. (Ph.D.)
Office of Student Counselling
Dartmouth College
Hanover, N. H. M 1952

KINGSLEY, Leonard
Box 327
Letterman Army Hospital
San Francisco, Calif. St. Aff. 1954

KIRK, Virginia (Ph.D.)
Vanderbilt University
School of Medicine
Nashville 4, Tenn. M 1944

KIRKNER, Frank J. (Ph.D.)
260 San Remo Drive
Long Beach 3, Calif. M 1949

KITZINGER, Helen
1016 Lindenwood Lane
Los Angeles 49, Calif. M 1949

KLASS, Walter K. (Ph.D.)
146 No. Sleight Street
Naperville, Ill. M 1946

KLATSKIN, Ethelyn H. (Ph.D.)
Department of Psychology
Yale University
333 Cedar Street
New Haven, Conn. M 1946

*KLEIN, Eva L. (M.D.)
1148—5th Avenue
New York 28, N. Y. M 1940

KLEINBERG, Mrs. Rosalyn K.
1438—67th Avenue
Philadelphia 26, Pa. M 1950

KLIGERMAN, Sidney (M.D.)
6 Linnaean Street
Cambridge, Mass. M 1950

*KLOPFER, Bruno (Ph.D.)
Box 2971
Carmel, Calif. F 1940

KLOPFER, Walter G. (Ph.D.)
Norfolk State Hospital M 1946
Norfolk, Nebraska F 1951

KOGAN, Kate L. (Ph.D.)
6034—44th Avenue, N. E. M 1941
Seattle 5, Wash. F 1944

KOGAN, William S. (Ph.D.)
6034—44th Avenue, N. E.
Seattle 5, Wash. M 1941

KORDA, Mrs. Geraldine J.
80 South Parkwood Avenue
Pasadena 10, Calif. M 1949

KORNER, Anneliese F. (Ph.D.)
2255 Pott M 1950
San Francisco 15, Calif. F 1953

KORNREICH, Melvin (Ph.D.)
147-10 84th Road
Kew Gardens, Queens, N. Y. M 1951

KOTKOV, Benjamin (Ph.D.)
8 Spring Street
Boston, Mass. M 1949

*KRAFFT, Mrs. Margaret R.
172 East 91st St., Apt. 5B
New York 28, N. Y. M 1940

KRAL, V. Adalbert (M.D.)
1849 Lincoln Avenue
Montreal, Quebec M 1953

KRASNER, Leonard (Ph.D.)
Department of Psychology
University of Colorado
Boulder, Colo. M 1952

KRECZKOWSKI, Joseph
729 Carson Street
Pittsburgh 3, Pa. M 1944

KROUT, Maurice H. (Ph.D.)
6838 S. Normal Blvd.
Chicago 21, Ill. M 1950

KRUGMAN, Dorothy C. (Ph.D.)
425 Riverside Dr.
New York 25, N. Y. M 1944

KRUGMAN, Herbert E. (Ph. D.)
425 Riverside Dr.
New York 25, N. Y. M 1943

KRUGMAN, Judith I. (Ph.D.)
100 Remsen Street
Brooklyn 2, N. Y. M 1941

•KRUGMAN, Morris (Ph.D.)
Board of Education
110 Livingston Street
Brooklyn 2, N. Y. F 1940

KUTASH, Samuel B. (Ph.D.)
3 Park Rd. M 1950
Maplewood, N. J. F 1951

LAKIN, Harriet A.
1959 S. Crescent Heights Blvd.
Los Angeles 34, Calif. M 1950

LANDISBERG, Selma
204 West 88th Street
New York 24, N. Y. M 1950

LASKOWITZ, David
1299 Grand Concourse
Bronx 51, N. Y. M 1953

LAWRENCE, James F. (Ph.D.)
V. A. Hospital
Brockton, Mass. M 1949

LEBEAUX, Mrs. Thelma W.
46 June Street
Worcester 2, Mass. M 1944

LEDER, Ruth
301 East 21st Street
New York 10, N. Y. M 1950

LEDWITH, Nettie H. (Ph.D.)
Child Guidance Center
3713 Fifth Ave. M 1948
Pittsburgh 13, Pa. F 1952

LEE, Dorothy B.
33-33 82nd Street
Jackson Heights 72, N. Y. M 1950

LEHMANN, Heinz E. (M.D.)
Verdun Protestant Hospital
Box 6034 M 1943
Montreal, Canada F 1951

LEHRER, Ruth (Ph.D.)
Woodside Receiving Hospital
8000 E. Indianola Ave. M 1944
Youngstown 8, Ohio F 1954

LEONARD, A. T.
620 Madison Avenue, S. E.
Grand Rapids, Mich. M 1954

LEOPOLD, Julius
Box 454
Gowanda State Hospital
Helmuth, N. Y. St. Aff. 1953

LETSON, Laddie
Claremont Graduate School
Claremont, Calif. M 1952

LEVENSTEIN, Mrs. Phyllis
67-33 Kissena Blvd.
Flushing, L. I., N. Y. M 1948

LEVI, Joseph (Ph.D.)
30 West 72nd Street M 1947
New York 23, N. Y. F 1954

LEVINE, Abraham
2354 Paulding Avenue
Bronx 69, N. Y. M 1952

LEVINE, Mrs. Phyllis R.
1587 Coventry Road
East Cleveland, Ohio M 1953

LEVINGER, Leah
Jewish Board of Guardians
228 East 19th Street
New York 3, N. Y. M 1952

LEVINSON, Boris (Ph.D.)
39-25—47th Street
Long Island City 4, N. Y. M 1952

LEVY, Ruth Jacobs (Ph.D.)
3018 E. 125th Street M 1948
Seattle 55, Wash. F 1951

LEWIN, Herbert S. (Ph.D.)
884 West End Ave. M 1951
New York, N. Y. F 1954

LEWIS, Robert T. (Ph.D.)
1608 Geranio Drive
Alhambra, Calif. M 1953

LIBRESCO, Emile
522 East 20th Street
New York 9, N. Y. M 1952

LIEBEN, Mrs. Beatrice
318 Ivy Lane
Englewood, N. J. M 1953

LITTLE, Jack F. (Ph.D.)
249 Montecito Avenue
Oakland 10, Calif. M 1949

LOCKWOOD, Wallace V. (Ph.D.)
2548 5th Avenue
San Diego 3, Calif. M 1949

LOEHRKE, Leah M. (Ph.D.)
Veterans Administration
12227 Clifton Blvd.
Lakewood, Ohio M 1954

LOLIS, Kathleen
275 Clinton Avenue
Brooklyn 5, N. Y. M 1949

LONGLEY, James L.
Industrial Psychology Division
2000 Second Avenue
Detroit 26, Mich. M 1953

LONSTEIN, Murray (Ph.D.)
Leech Farm Road
Pittsburgh 6, Pa. M 1953

•LOPES, Jose Leme (M.D.)
Rua Martins Ferreira 75
Rio de Janeiro, Brazil F 1940

LORD, Edith (Ph.D.)
420 W. 24th Street
New York 11, N. Y. M 1953

LOWE, Mrs. Evelyn
1213 North Lake Avenue
Pasadena, Calif. M 1948

LUCAS, Mrs. Winafred B.
2147 Dellwood Lane
Los Angeles 24, Calif. M 1951

LUSSIER, Andre
39 W. Blvd. Gouin
Montreal, Canada M 1951

LYLES, William K.
52 Central Avenue
St. George, Staten Island, N. Y. M 1953

MacDONALD, D. Stewart (Ph.D.)
Child Guidance Center
1517 H Street
Lincoln, Nebraska M 1950

MACHOVER, Mrs. Karen
96-16—67th Avenue M 1947
Forest Hills, N. Y. F 1948

MACHOVER, Solomon (Ph.D.)
96-16—67th Avenue M 1947
Forest Hills, N. Y. F 1948

MAHLER, Paul H. (Ph.D.)
102 West 80th Street
New York 24, N. Y. M 1949

MAITI, Haripada P.
Asst. Regs. Quarter
Patna 6, India M 1952

MALLINGER, Betty R. (Ph.D.)
600 S. Negley Avenue
Pittsburgh 32, Pa. M 1952

MALLOY, Mrs. Helga
35 Church Hill
Montreal 6, Quebec, Canada M 1943

MALM, Mrs. Mildred
11423 East Hallwood Drive
El Monte, Calif. M 1949

***MANN, Mrs. Edna**
215 West 98th Street
New York 25, N. Y. F 1940

MANSON, Morse P. (Ph.D.)
1329 Woodruff Avenue
Los Angeles 24, Calif. M 1950

MANUILOW, Tatiana
Allan Memorial Institute of Psychiatry
1025 Pine Avenue W.
Montreal, Quebec M 1954

MARGOLIS, Mrs. Muriel F.
97-40—64th Avenue
Rego Park, L. I., N. Y. M 1949

MARKER, Mrs. Beatrice W.
2131 Delancey Place
Philadelphia 3, Pa. M 1951

MARKS, Lily Brunschwig (Ph.D.)
219 Arcadia Street
Park Forest, Ill. M 1953

***MARSEILLE, Walter W. (Ph.D.)**
288 Ewing Terrace
San Francisco 18, Calif. F 1940

MATHER, Elise D.
5260 W. Chicago
Detroit 4, Mich. M 1948

MATHEWS, W. Mason (Ph.D.)
Merrill-Palmer School
71 Ferry Avenue, East
Detroit 2, Mich. M 1949

MATHIAS, Rudolf
321 So. Midvale Blvd.
Madison, Wis. M 1950

***McBRIDE, Katherine E. (Ph.D.)**
Bryn Mawr College
Bryn Mawr, Pa. M 1940

McCARY, James L. (Ph.D.)
3815 Fannin Street
Houston 4, Texas M 1948

McCLOSKEY, Mrs. E. Venita Amsler
5515 Wissahickon Avenue
Philadelphia 44, Pa. M 1948

McDONALD, Franklin R. (Ph.D.)
2319 So. La Brea Avenue
Los Angeles 16, Calif. M 1952

McNEILL, Harry V. (Ph.D.)
125 East 26th Street M 1950
New York 10, N. Y. F 1951

MEHR, Helen Margulies (Ph.D.)
498 McArthur Avenue M 1941
San Jose, Calif. F 1949

MERCER, Margaret (Ph.D.)
4217 Fourth Street S.E. M 1946
Washington 20, D. C. F 1950

MEYER, George (Ph.D.)
2479 16th Avenue
San Francisco, Calif. M 1950

***MEYER, Mortimer M. (Ph.D.)**
348 No. Windsor Blvd. M 1940
Los Angeles 4, Calif. F 1949

***MIALE, Mrs. Florence**
860 Riverside Drive
New York, N. Y. F 1940

MICHAELI, Mrs. Ann
Pontiac State Hospital
Pontiac 11, Mich. M 1950

MILLER, Carmen (Ph.D.)
5935 Colhurst
Dallas, Texas M 1951

MILLER, Cecil R.
6601 Zelzah Avenue
Reseda, Calif. St. Aff. 1953

MILSTEIN, A. Freda
1032 Vaughn
Ann Arbor, Mich. M 1946

MIMS, Mrs. Jean Giesey
3715 Tom Green Street
Austin, Texas M 1943

MINDESS, Harvey (Ph.D.)
900 Sherbrooke Street
Montreal, Quebec M 1953

MOLISH, Herman B., LCDR, MSC, USNR
Naval Medical Center - Staff
Bethesda, Md. M 1950

MONTALTO, Fannie D. (Ph.D.)
2654 Fourth Avenue
San Diego 3, Calif. M 1952

MOORE, Mrs. Harriett Bruce
430 N. Michigan Avenue
Chicago 11, Ill. M 1953

MORELAND, Mrs. Margaret E.
Kirkwood Drive
Grand Island, N. Y. M 1950

MORF, Gustave (Ph.D., M.D.)
1410 Fayolle Avenue
Montreal 19, Quebec M 1954

MORGAN, Clellan L. (Ph.D.)
RFD No. 3
Media, Pa. M 1950

MORGAN, David W. (M.D.)
127 N. Madison Avenue
Pasadena 1, Calif. M 1943

MORGAN, Olive J. (Ph.D.)
RFD No. 3
Media, Pa. M 1950

MORIZE, Mrs. Andre
4, Rue Jean-du-Bellay
Paris 4°
France M 1945

MORROW, J. Lloyd (M.D.)
197 Passaic Avenue
Passaic, N. J. M 1943

MUELLER, Adolph R. (M.D.)
516 South Fifth Street
Leavenworth, Kansas M 1943

MUELLER, Mrs. Agnes
Low Road Farm
Sharon, Conn. M 1951

MUENCH, George (Ph.D.)
San Jose State College
San Jose, Calif. M 1946

MULLEN, Esther
49 East 40th Street
Brooklyn 3, N. Y. M 1950

*MUNROE, Ruth (Ph.D.)
130 East 67th Street
New York 21, N. Y. F 1940

MURPHY, Rev. Kenneth
26 South Center Street
Springfield, Ohio Aff. 1954

MURPHY, Lois Barclay (Ph.D.)
Menninger Foundation
Topeka, Kansas M 1941

MURRAY, Henry (M.D.) M 1948
Topsfield, Mass. F 1950

NAGELBERG, Leo (Ph.D.)
3900 Greystone Avenue
New York, N. Y. M 1952

NAPOLI, Peter J. (Ed.D.)
Crompond Road
R.F.D. 2
Yorktown Heights, N. Y. M 1949

NEU, Mrs. Ruth Warburg
311 East 72nd Street
New York 21, N. Y. M 1953

NEWMAN, Joseph, (Ph.D.)
Veterans Administration Hospital
1025 E. H. Crump Blvd.
Memphis 4, Tenn. M 1950

NICHOLAS, Alma L.
200 Retreat Avenue
Hartford 2, Conn. M 1954

NIKEL, Frank
980 Cherry St.
Phoenixville, Pa. M 1948

OCHROCH, Ruth
161 West 103rd Street
New York 25, N. Y. M 1950

ODOM, Charles L. (Ph.D.)
602 Carondelet Bldg.
New Orleans 12, La. M 1949

OETTINGER, Mrs. Malcolm
645 N. Webster Avenue
Scranton, Pa. M 1945

OLINGER, Leonard
1280 N. Harper Avenue
Los Angeles 46, Calif. M 1954

OPPENHEIM, Mrs. Sadi
120 Riverside Drive
New York 24, N. Y. M 1947

ORGEL, Sidney A.
Drawer 508
Norwich State Hospital
Norwich, Conn. M 1952

OSSORIO, Abel Garcia (Ph.D.)
Department of Psychology
Washington University
Saint Louis, Mo. M 1950

PAPANIA, Ned
13238 N. Norfolk
Detroit 35, Mich. M 1954

PARKER, Almena
Shelborn Towners
Knoxville, Tenn. M 1951

PARNICKY, Joseph J.
School of Social Work
Adelphi College
Garden City, N. Y. M 1949

PARSONS, Rosa F.
3321 Columbia Street
San Diego 1, Calif. M 1947

*PAULSEN, Alma A. (Ph.D.)
416 West 20th Street
New York 11, N. Y. F 1940

PAYNE, David H. (Ph.D.)
1127 Wilshire Blvd.
Los Angeles 17, Calif. M 1950

PEAK, Horace M.
Psychology Department
Patton State Hospital
Patton, Calif. M 1949

PEATMAN, Mrs. Lillie B.
104 Beach Avenue
Larchmont, N. Y. M 1944

PEMBERTON, W. H. (Ph.D.)
481 Summit Ave.
Mill Valley, Calif. M 1941

PEÑA, Cesareo D. (Ph.D.)
South Street
Williamsburgh, Mass. M 1951

PENNINGROTH, Paul W. (Ph.D.)
Child Guidance Clinic
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757 4th Street N.
St. Petersburg 2, Fla. M 1943

PERCIVAL, Harry F. (Ed.D.)
State Teachers College
Fitchburg, Mass. M 1953

PETERS, Donald B.
10616 Blythe Avenue
Los Angeles 64, Calif. M 1947

PETERS, Marie Wilson
6144 Wayne Avenue M 1947
Philadelphia 44, Pa. F 1951

PHILIPSBORN, Arthur (M.D.)
Cleveland State Hospital
Cleveland 5, Ohio M 1947

PHILLIPS, Mrs. Allvertta B.
3602 N. Meridian St.
Indianapolis, Ind. M 1950

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Psychiatric Institute
722 West 168th Street
New York 32, N. Y. F 1940

PLATT, Henry (Ph.D.)
Jewish Family and
Childrens Service
6 North Russell Street
Boston 14, Mass. M 1950

PLITTMAN, Jack C.
487 East 21st Street
San Bernardino, Calif. M 1951

POSER, Ernest George (Ph.D.)
Mental Health Div.
Department of Health and Social
Services M 1950
Fredericton, New Brunswick F 1953

PRADOS, Miguel (M.D.)
McGill University
3801 University Street
Montreal, Canada M 1942

PROCTOR, Paul W. (Ph.D.)
145 Bleecker Street
New York 12, N. Y. M 1951

PUZZO, Frank S.
130-52–232nd Street
Laurelton, N. Y. M 1949

QUAYLE, Margaret S. (Ph.D.)
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University, Alabama F 1952

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Austen Riggs Foundation
Stockbridge, Mass. M 1940

RAPKIN, Maurice (Ph.D.)
Los Angeles Psychological
Service Center
269 S. Loma Drive
Los Angeles 26, Calif. M 1952

RAPPAPORT, Sheldon R. (Ph.D.)
63-1 Drexelbrook Drive
Drexel Hill, Pa. M 1951

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Lakeside Apartments, 18A
Melrose Park 26, Pa. M 1949

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Rosemont, Pa. M 1952

REED, Philip B. (M.D.)
1820 East Tenth Street
Indianapolis 1, Ind. M 1949

REICHARD, Suzanne (Ph.D.)
1075 Cragmont Avenue
Berkeley, Calif. M 1941

REICHENBERG-HACKETT, Wally (Ph.D.)
Dept. of Psychology
Duke University
Durham, N. C. M 1948

REINTHAL, Mrs. Mary E.
3341 Medina Line Rd.
W. Richfield, Ohio M 1951

REIS, Walter J. (Ph.D.)
221 Mt. View St.
Decatur, Ga. M 1943

REITZ, Mrs. Edna Maisner
4074 Tuxedo
Detroit 4, Mich. M 1953

REITZELL, Mrs. Jeanne M.
500 So. Arroyo Boulevard
Pasadena 2, Calif. M 1949

RIBEIRO, Dr. Rene
1912 Avenue, N. S.
Navegantes, Recife, Brazil M 1951

RICHARDS, T. W. (Ph.D.)
Department of Neuropsychiatry
LSU School of Medicine
New Orleans 12, La. M 1942

***RICKERS-OVSIANKINA, M. (Ph.D.)**
University of Connecticut
Storrs, Conn. F 1940

RISCH, Frank (Ph.D.)
10722½ Francis Place
Los Angeles 34, Calif. M 1949

RITCHEY, Dr. Hardin
3015 Seventh Ave. S.
Birmingham, Alabama M 1953

*RITEY, Hector J. (M.D.)
815 Park Avenue
New York 21, N. Y. M 1940

*RIVERS, Mrs. Hubert M.
111 Mitchell Drive
Pittsburgh 16, Pa. M 1940

ROBINSON, Elizabeth Foster
Central Child Guidance Clinic
101 Bradley Memorial
University Hospitals
Madison, Wisconsin M 1954

ROCKBERGER, Harry (Ph.D.)
Veterans Hospital
East Orange, N. J. M 1954

RODAN, Mrs. Henrietta Itta
515 East 85th Street
New York 28, N. Y. St. Aff. 1954

ROGERS, Lawrence S. (Ph.D.)
1046 Madison Street M 1949
Denver, Colo. F 1954

ROSEN, Esther Katz (Ph.D.)
239 West Allen Lane M 1945
Philadelphia 19, Pa. F 1951

ROSENBERG, Israel H.
89-38 Whitney Avenue
Elmhurst 73, L. I., N. Y. M 1953

ROSS, M. Eleanor
Tri-County Mental Health Clinics
Norristown, Pa. M 1944
F 1949

*ROSS, W. Donald (M.D.)
Department of Psychiatry
Cincinnati General Hospital
Cincinnati 29, Ohio F 1940

*ROST, Mrs. Mollie
258 Riverside Drive
New York, N. Y. M 1940

ROTHSCHILD, Jacob (Ph.D.)
10 East 76th Street
New York 21, N. Y. M 1953

ROTMAN, Saul R.
15 Derby Street
West Concord, Mass. M 1947

RUHL, Mrs. R. Ernest
817 Chestnut Street
Mifflinburg, Pa. M 1947

RUJA, David H. (Ph.D.)
954 N. Vermont Ave.
Los Angeles 29, Calif. M 1949

*RYMER, Charles A. (M.D.)
Colorado Psychopathic Hospital
4200 East 9th Avenue
Denver, Colo. F 1940

ST. CLAIR, Walter F. (Ed.D.)
867 Hall Street
Manchester, N. H. M 1943

SALTZMAN, Marguerite R.
2533 South 21st Street
Philadelphia 45, Pa. M 1950

SALTZMAN, Sara
7012 Wilson Lane
Bethesda 14, Md. M 1950

SALZMAN, Mrs. Anne
939 N. Hoover Street
Los Angeles 29, Calif. M 1953

SANDER, Emilie T.
657 West 161st Street
New York, N. Y. M 1949

SANDERSON, Herbert (Ph.D.)
166 Hartford Ave.
Kenmore 23, N. Y. M 1952

SANFORD, R. Nevitt (Ph.D.)
Department of Psychology
University of California M 1948
Berkeley, Calif. F 1950

SARASON, Mrs. Esther K.
Institute of Human Relations
Yale University
333 Cedar Street
New Haven, Conn. M 1944

SARASON, Seymour B. (Ph.D.)
Institute of Human Relations
Yale University
333 Cedar Street
New Haven, Conn. M 1944

SARGENT, Helen D. (Ph.D.)
2025 Westwood Dr. M 1945
Topeka, Kansas F 1950

SCHACHT, Mrs. Leatrice Styrt
138 East 78th Street
New York 21, N. Y. M 1950

SCHACHTEL, Ernest G.
299 Riverside Drive
New York 25, N. Y. F 1951

SCHACHTEL, Mrs. Zeborah
299 Riverside Drive
New York 25, N. Y. M 1953

SCHAFER, Roy (Ph.D.)
School of Medicine
Yale University
333 Cedar Street
New Haven, Conn. M 1953

SCHATTMAN, Mrs. Esther Preger
210 East 68th Street
New York 21, N. Y. M 1950

SCHERER, I. W. (Ph.D.)
Veterans Administration
Northampton, Mass. M 1949

SCHILLINGER, Morton
220 West 98th Street
New York 25, N. Y. M 1953

*SCHLESINGER, Mrs. Alicia de
Solis 155, VIII/A
Buenos Aires, Argentina M 1940

SCHMIDL, Fritz, M. S., Dr. Jur.
539 32nd Avenue South M 1942
Seattle 44, Wash. F 1945

SCHNEIDER, Stanley F. (Ph.D.)
Psychology Department
University of Michigan
Ann Arbor, Mich. M 1954

SCHONBAR, Rosalea Ann (Ph.D.)
3382—171st Street
Flushing 58, N. Y. M 1943

SCHUBERT, Herman J. P. (Ph.D.)
Route No. 2
Williamsville 21, N. Y. M 1950

SCHULMAN, Doris
5108—17th Avenue
Brooklyn, N. Y. M 1948

SCHULMAN, Irving
Guidance Institute
844 Center Avenue
Reading, Pa. M 1952

SCHUMACHER, Audrey Sims (Ph.D.)
400 Kentucky Avenue M 1941
Berkeley, Calif. F 1949

SCHUMACHER, Henry C. (M.D.)
400 Kentucky Avenue
Berkeley, Calif. M 1941

SCHWARTZ, Arthur A.
722 West 176th Street
New York 33, N. Y. M 1951

SCHWARTZ, Emanuel K. (Ph.D.)
65 East 76th Street M 1949
New York 21, N. Y. F 1952

SCHWERIN, Mrs. Erna
2000 Shawnee Blvd.
Lima, Ohio M 1950

SEIDENFELD, Morton A. (Ph.D.)
National Foundation for
Infantile Paralysis
120 Broadway
New York 5, N. Y. M 1944

SEILER, Mrs. Geraldine F.
The Embassy
2100 Walnut Street M 1946
Philadelphia 3, Pa. F 1950

SEITZMAN, Daniel
2387 Ocean Ave.
Brooklyn 29, N. Y. M 1949

SELIG, Kalman
188 Clinton Avenue
Newark 5, N. J. M 1950

SEYMOUR, Charlyne T. Storment (Ph.D.)
11-69th Place
Long Beach 3, Calif. M 1952

SHACKETT, Mrs. Sarah Eyre
Robles del Rio
R.F.D., Cal. M 1942

SHAPERO, Mrs. Amy Miller
34 Hubbard Avenue
Stanford, Conn. M 1949

SHAPIRO, David (Ph.D.)
Austen Riggs Foundation
Stockbridge, Mass. M 1950

SHAPIRO, Mrs. Irene
180 East 17th Street
Brooklyn 26, N. Y. M 1950

SHARPE, Susie McMillan
46 West 4th Street
Mount Vernon, N. Y. M 1948

SHEEHAN, Joseph (Ph.D.)
Department of Psychology
University of California
Los Angeles 24, Calif. M 1952

SHELLOW, Sadie M. (Ph.D.)
1415 Fiesta Rd.
Palm Springs, Calif. M 1952

SHNEIDMAN, Edwin S. (Ph.D.)
114-15 Rose Ave. M 1949
Los Angeles 34, Calif. F 1951

SHOBEN, Edward J., Jr. (Ph.D.)
Teachers College
Columbia University
New York 27, N. Y. M 1952

SHOR, Joel (Ph.D.)
103 East 86th Street
New York 28, N. Y. M 1945

SIEGEL, Edward L. (Ph.D.)
606 E. Raynor Ave.
Syracuse, N. Y. M 1950

SIEGEL, Max (Ph.D.)
58-32—210th Street
Bayside, N. Y. M 1949

SIEGEL, Miriam G. (Ph.D.)
57 East 90th Street M 1942
New York 28, N. Y. F 1949

SIMKIN, James S. (Ph.D.)
721 Pleasant Valley Way
West Orange, N. J. M 1952

SINGER, Roland H.
529 Wiconisco Street
Harrisburg, Pa. M 1953

SLESS, Bernard
225 Upland Road
Merion, Pa. M 1952

SLOMAN, Mrs. Else
562 West 113th Street
New York 25, N. Y. M 1945

SMITH, Mrs. Margaret J.
Mendota State Hospital
Madison 9, Wis. M 1950

SMOLINSKY, Harold J.
Psychology Department
Embreeville State Hospital
Embreeville, Pa. M 1952

SNOWDEN, Robert F.
2400 E. Mountain Street
Pasadena 7, Calif. M 1953

SNYDER, Mrs. Marguerite A.
96 Sampson Avenue
Pittsburgh 5, Pa. M 1952

SOBOL, Albert L.
26 West 9th Street
New York 11, N. Y. M 1949

SOMMERS, Vita Stein (Ph.D.)
981 So. Westmoreland
Los Angeles 6, Calif. M 1946

SOSNOFF, Mrs. Miriam
429 Caroline Street
Key West, Florida St. Aff. 1953

SPANEY, Emma (Ph.D.)
121-09—133rd Avenue
South Ozone Park 20, N. Y. M 1949

SPENCER, Mrs. Betty L.
1908 Parkview Street
Huntington, W. Va. M 1951

SPIEGELMAN, J. Marvin (Ph.D.)
640 S. Bundy
Los Angeles 48, Calif. M 1953

SPIN, Mrs. Lillian
500 East 56th Street
Brooklyn 30, N. Y. M 1950

SPINDLER, Mrs. Joan Elizabeth
5853 McLynn Avenue
Montreal 29, Canada M 1948

SPITZER, Paul S.
P. O. Box 56
Waterman, Calif. M 1951

STANFORD, Margaret J.
Sonoma State Home
Eldridge, Calif. M 1950

STANTON, Mrs. Harriet
15 Livermore Road
Wellesley Hills 82, Mass. M 1942

STAVRIANOS, Mrs. Bertha
Psychology Department
Stanford University
Stanford, Calif. M 1943

STEED, Mrs. Gitel Poznanski
230 East 15th Street
New York, N. Y. M 1949

STEEN, Thomas W. (Ph.D.)
Box 1112
Collegedale, Tenn. M 1954

STEINBERG, Arthur (Ph.D.)
76 Bay State Road
Boston 15, Mass. M 1941

STEINER, Matilda E.
Employee Relations
General Electric Co.
570 Lexington Avenue M 1943
New York 22, N. Y. F 1946

STEINER, Meta (Ph.D.)
40-70 Hampton St. M 1948
Elmhurst 73, N. Y. F 1950

STEINZOR, Bernard (Ph.D.)
Sarah Lawrence College
Bronxville, N. Y. M 1943

STEISEL, Ira M. (Ph.D.)
Psychiatric Clinic for Children
University of Washington
Seattle 5, Wash. M 1951

STENDEL, Kathleen
655 Landfair Avenue
Los Angeles 24, Calif. M 1950

STEPHENS, Gordon M. (M.D.)
189 Kingsway Avenue
Winnipeg, Man., Can. M 1941

STERN, Mrs. Phyllis Glaser
2115-B So. John Russell Circle
Elkins Park 17, Pa. M 1952

STERNE, Spencer B.
Department of Psychology
Wayne County General Hospital
Eloise, Mich. M 1953

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267 S. New Hampshire
Los Angeles 4, Calif. M 1949

STONE, Irving R.
State Mental Hygiene Clinic
3525—4th Avenue
San Diego 3, Calif. M 1951

•STONE, L. Joseph (Ph.D.)
Vassar College M 1940
Poughkeepsie, N. Y. F 1951

STONESIFER, Fred A.
208 N. Broad St.
Selinsgrove, Pa. M 1951

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3760 N. Pennsylvania St.
Indianapolis, Ind. M 1949

STOPOL, Murray S. (Ph.D.)
1383 W. Maynard Drive
St. Paul 2, Minn. M 1953

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Washington 8, D. C. M 1953

STRAIT, Bennett
38 N. Seventh Street
Stroudsburg, Pa. M 1950

STRAUSS, Mrs. Elsa L.
3819 Dakota Street
Cincinnati, Ohio M 1951

STRUTHERS, Alice Ball (Ph.D.)
2501 Palos Verdes Drive North
Palos Verdes Estates, Calif. M 1949

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1592 W. 5th Street
Brooklyn 4, N. Y. M 1950

SUESSMILCH, Frederick L.
141 Lafayette Avenue M 1946
Brooklyn 38, N. Y. F 1951

SWIFT, Joan Woodcock (Ph.D.)
5628 S. Blackstone Avenue
Chicago 37, Ill. M 1945

SYMONDS, Percival M. (Ph.D.)
Teachers College
Columbia University M 1950
New York 27, N. Y. F 1951

TABIN, Johanna Krout (Ph.D.)
Chicago Psychological Institute
410 South Michigan Avenue
Chicago 5, Ill. M 1952

TALLENT, Norman
91 Carver Street
Springfield 8, Mass. M 1953

•TALLMAN, Gladys
Kent, Conn. F 1940

TAULBEE, Earl S.
Psychology Department
Norfolk State Hospital
Norfolk, Nebraska M 1953

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2040 McGraw Avenue
Bronx 62, N. Y. M 1940

TENNEY, Edward Vernon (Ph.D.)
735 Holland Avenue
Fresno, Calif. M 1948

TILLINGHAST, Anne W.
Highland Hospital
Asheville, N. C. M 1948

TOLMACH, Mrs. Regina E.
16 West 77th Street
New York 24, N. Y. M 1949

TOLMAN, Ruth S. (Ph.D.)
345 S. Michigan Avenue M 1949
Pasadena 5, Calif. F 1950

TOMKINS, Silvan S. (Ph.D.)
36 College Road
Princeton, N. J. M 1948

TOPPING, Marion
122 East 22nd Street
New York 10, N. Y. M 1948

TOWNSEND, Mrs. Marjorie M.
Plainfield, Vermont M 1949

TREAT, Wolcott C.
1628 Fiftieth Street
San Diego 2, Calif. M 1953

TROUP, Evelyn (Ph.D.)
11408 Burnham Street M 1948
Los Angeles 49, Calif. F 1949

•TUFT, Dr. Carlyn M.
4613 Larchwood Avenue
Philadelphia, Pa. M 1940

VACCARO, J. John (Ph.D.)
105-34 63rd Ave.
Forest Hills 75, N. Y. M 1951

VAN ALSTYNE, Dorothy (Ph.D.)
1725—17th Street N. W.
Washington 9, D. C. M 1949

VANDENBERG, Steven G.
Inst. of Human Biology
1135 E. Catherine
Ann Arbor, Mich. M 1951

VAN TUYL, Mary C. (Ph.D.)
100 Asilomar Boulevard
Pacific Grove, Calif. M 1949

VAN WEST, Mrs. Joan
177 Chrystie Street
New York 2, N. Y. St. Aff. 1954

VAYHINGER, John M.
Mental Health Clinic
527 W. Colfax Ave.
South Bend 1, Ind. M 1952

VINSON, David, Jr.
Baylor University
College of Medicine
Houston, Texas M 1949

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New York 24, N. Y. F 1944

WAGNER, Mazie Earle (Ph.D.)
N. Y. State Teachers College
1300 Elmwood Avenue
Buffalo, N. Y. M 1950

WALKER, Robert G. (Ph.D.)
461 Norfolk St.
Holliston, Mass. M 1952

WALLEN, Richard W. (Ph.D.)
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Western Reserve University
Cleveland 6, Ohio M 1953

WALTON, Mrs. Norma R.
142-C River Terrace Dr.
East Lansing, Mich. M 1949

WARNER, Samuel J. (Ph.D.)
216 East 70th Street
New York 21, N. Y. M 1953

WARREN, Lurene Z.
445½ Michigan
Petoskey, Mich. M 1949

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2889 Torrington Road
Shaker Heights 22, Ohio M 1949

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New York 3, N. Y. M 1949

WEINREBE, Claire
225 East 11th Street
New York 3, N. Y. St. Aff. 1953

WEIR, John R. (Ph.D.)
2841 Highview Avenue
Altadena, Calif. M 1954

WEISS, Emalyn R.
832 Centre Ave.
Reading, Pa. M 1950

WEISS, Herman R. (Ph.D.)
1277 East 48th Street
Brooklyn, N. Y. M 1953

WEISS, Sheldon W.
520 Carbondale Rd.
Waymart, Pa. M 1951

WEISSKOPF-JOELSON, Edith (Ph.D.)
Department of Psychology
Purdue University M 1943
Lafayette, Ind. F 1951

WEISSMANN, Serena
468 Riverside Drive
New York 27, N. Y. M 1950

WELLS, Frederick Lyman (Ph.D.)
13 Holyoke Street Honorary
Cambridge 38, Mass. M 1950

WENGATE, Pauline
Route 3
Piedmont, S. C. M 1950

WENTLING, Verda M.
172 East 91st Street
New York 28, N. Y. M 1950

WENTWORTH-ROHR, Ivan (Ph.D.)
123 Waverly Place
New York 11, N. Y. M 1949

WERNER, Kathryn
321 West 11th Street
New York 14, N. Y. M 1952

WEXLER, Rochelle M.
1938 East 12th Street
Brooklyn 29, N. Y. M 1949

WHITE, Mrs. Helen Cecelia
1025 Worsham Drive
Whittier, Calif. M 1950

WHITENACK, Betty
625 St. Paul St.
Baltimore, Md. M 1952

WHITMAN, Roy M. (M.D.)
950 East 59th Street
Chicago 37, Ill. M 1954

WHITSELL, Leon J. (M.D.)
52 Shore View Avenue
San Francisco 21, Calif. M 1942

WICKERSHAM, Francis Myron (Ph.D.)
U.S.P.H.S.H.
Fort Worth, Texas M 1952

WIGDOR, Blossom T. (Ph.D.)
5580 Gatineau Avenue
Montreal 26, Canada M 1949

WILCOX, George T.
The Evergreens
R. D. 1
State College, Pa. St. Aff. 1954

WILKINS, Mrs. Verna M.
Mother Goose Nursery School
9800 Warren Street
Silver Springs, Md. M 1950

WILLIAMS, Gertha (Ph.D.)
17211 Buckingham Rd. M 1944
Birmingham, Mich. F 1949

WILLIAMS, Mrs. Gertrude J.
Norfork State Hospital
Norfolk, Neb. St. Aff. 1954

WILLIAMS, Helen E. (Ed.D.)
Division of Neuropsychiatry
U. S. Naval Hospital
St. Albans, L. I., N. Y. M 1950

WILLIAMS, Mrs. Jessie M. Griffins
Abinger Hammer
Nr. Dorking, England M 1950

WILLIAMSON, Margaret O.
4 Bayview Place
Staten Island 4, N. Y. M 1945

WILSON, Mary T.
122½ Blithewood Ave.
Worcester 4, Mass. M 1944

WITZEMAN, B. Evangeline (Ph.D.)
5021 Hawkins Rd.
West Richfield, Ohio M 1952

WOLF, Klara C. (Ph.D.)
10959 Roebling St.
Los Angeles 24, Calif. M 1951

WOLF, S. Jean (Ph.D.)
220 Fifth Avenue
New York 1, N. Y. M 1944

•WOLFSON, Mrs. Ruth
124 West 79th Street
New York 24, N. Y. F 1940

WOLPE, Zelda S. (Ph.D.)
8706 Wilshire Blvd.
Beverly Hills, Calif. M 1950

WOLTMANN, Adolf G.
147 East 81st Street
New York 28, N. Y. M 1949

WOOD, Austin B. (Ph.D.)
Psychology Department
Brooklyn College
Brooklyn 10, N. Y. M 1943

WOOLF, Henrietta K.
3345 Dent Place, N. W.
Washington 7, D. C. M 1950

WRIGHT, M. Erik (M.D.)
Department of Psychology
University of Kansas
Lawrence, Kansas M 1943

WYATT, Frederick (Ph.D.)
1027 E. Huron St. M 1948
Ann Arbor, Mass. F 1949

YUDIN, Sidney
Department of Psychology
Bellevue Psychiatric Hospital
New York, N. Y. M 1952

ZADEK, Mildred A.
131 Lincoln Road
Brooklyn 25, N. Y. M 1949

ZIERER, Ernest
42-05 Layton Street
Elmhurst, N. Y. M 1952

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2564 Sepulveda Blvd.
Los Angeles 64, Calif. M 1949

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276 Riverside Drive M 1945
New York 25, N. Y. F 1950

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Warren, Lurene Z.
Williams, Gertha

Ann Arbor
Aberle, David F.
Hutt, Max L.
Milstein, A. Freda
Schneider, Stanley F.
Vandenberg, Steven
Wyatt, Frederick

Detroit
Brownfain, John J.
Clapp, Chester D.
Dryzer, Evelyn F.
Feinberg, Henry
Kellman, Samuel
Longley, James L.
Mather, Elise D.
Mathews, W. Mason
Papania, Ned
Reitz, Edna Maisner

MINNESOTA

Aalto, Ensio E.

St. Paul
Herness, Christina
Stopol, Murray S.

MISSOURI

Geil, George A.
Greenstadt, Wm. M.
Hilden, Arnold H.
McPherson, Marion White
Ossorio, Abel Garcia

NEBRASKA

MacDonald, D. Stewart

Norfolk
Klopfer, Walter G.
Taulbee, Earl S.
Williams, Gertrude J.

NEW HAMPSHIRE

King, Francis W.
St. Clair, Walter F.

NEW JERSEY

Abramson, Leonard S.
Beran, Marianne
Feldman, Irving
Frey, Harriet K.
Gersten, Charles
Goodman, Morris
Hahn, Albert R.
Hoch, Erasmus L.
Kutash, Samuel B.
Morrow, J. Lloyd
Rockberger, Harry
Selig, Kalman
Simkin, James S.
Tomkins, Silvan S.

Englewood
Haines, Miriam Stearns
Junken, Elizabeth
Lieben, Beatrice

Linden
Gasorek, Kathryn
Greenberg, Pearl

Upper Montclair
Brower, Daniel
Brower, Judith

NEW YORK

Abel, Theodora M.
Abt, Lawrence Edwin
Amchin, Abraham
Ball, Josephine
Barringer, Benton E.
Bernstein, Mildred
Braun, Roslyn
Bruce, Martin
Carr, Arthur C.
Chamouloud, Muriel
Cohn, Frederick
Davidson, Alene
Diamond, Gertrude S.
Fike, Irene A.
Friedman, Howard
Gillman, Etta C.
Gurvitz, Milton S.
Hirsch, Janet F.
Holodnak, Helen Barbara
Joseph, Alice
Kaplan, Herbert
Kornreich, Melvin
Lee, Dorothy
Leopold, Julius
Lyles, William K.
Margolis, Muriel F.
Moreland, Margaret
Napoli, Peter J.
Peatman, Lillie B.
Puzzo, Frank S.
Sanderson, Herbert
Schubert, Herman
Siegel, Edward L.
Siegel, Max
Spaney, Emma
Steinzor, Bernard
Stone, L. Joseph
Wagner, Mazie Earle
Williamson, Margaret O.

Bronx

Jacob, Zoltan
Laskowitz, David
Levine, Abraham
Teich, Marianne

Brooklyn

Abbate, Grace McLean
Abrams, Elias N.
Anderson, Helen Joan
Harris, June
Harris, Robert A.
Krugman, Judith I.
Krugman, Morris
Lolis, Kathleen
Mullen, Esther
Schulman, Doris
Seitzman, Daniel
Shapiro, Irene
Spin, Lillian
Sudy von Roediger, Esther
Suessmilch, Frederick
Weiss, Herman R.
Wexler, Rochelle M.
Wood, Austin B.
Zadek, Mildred

Elmhurst

Rosenberg, Israel H.
Steiner, Meta
Zierer, Ernest

Forest Hills

Machover, Karen
Machover, Solomon
Vaccaro, J. John

Flushing

Harris, Albert J.
Levenstein, Phyllis
Schonbar, Rosalea Ann

Garden City

Derner, Gordon
Parnicky, Joseph J.

Long Island City

Baron, Samuel
Levinson, Boris

Mt. Vernon

Aronson, Marvin L.
Sharpe, Susie McMillan

New York City

Ackerman, Bernard
Alozery, Jessica Jervis
Alvarado, Lois de
Anastasio, Mary M.
Auerbach, Aline B.
Barnett, Irving
Bartlett, Doris A.
Bellak, Leopold
Blum, Lucille Hollander
Boles, Glen
Bondel, Gertrude
Brecher, Sylvia
Brody, Abraham
Brody, Gertrude
Brown, Fred
Bry, Mae G.
Burchard, Edward M. L.
Burgemeister, Bessie B.
Calabresi, Renata
Caligor, Leopold
Carroll, Clara
Cohen, Mathilde Weill
Cohn, Ruth C.
Cowin, Marion
Davidson, Helen H.
Deri, Susan K.
Dudek, Stephanie
Ellis, Albert
Emery, Margaret
Ephron, Beulah K.
Epstein, Hans L.
Faterson, Hanna F.
Fine, Reuben
Fisher, Lillian Jagoda

Friedman, Alice
Fuchsman, Seymour
Gaudet, E. Louise
Gaudet, Frederick J.
Gelles, Herbert M.
Goldfarb, William
Gondor, Lily H.
Goodman, Carolyn
Gordon, Thelma
Gottlieb, Lucille S.
Gottlieb, Sophie
Greene, Janet S.
Gundlach, Ralph
Gurevitz, Saul
Gurvich, Bernice M.
Gutman, Brigette
Haber, William B.
Hammer, Emanuel
Harris, William W.
Harrower, Molly R.
Hertzman, Max
Holmes, Frances B.
Holt, Robert R.
Houck, Dorothy
Jahoda, Hedwig
Johnson, Richard B.
Kaback, Goldie Ruth
Kadis, Asya
Kalinkowitz, Bernard N.
Kapit, Milton E.
Katz, Florine
Katz, Harriet
Kaufmann, Elizabeth M.
Kemple, Camilla
Kew, Clifton
Klein, Eva L.
Krafft, Margaret R.
Krugman, Dorothy C.
Krugman, Herbert E.
Landisberg, Selma
Leder, Ruth
Levi, Joseph
Levinger, Leah
Lewin, Herbert S.
Libresco, Emile
Lord, Edith
Mahler, Paul H.
Mann, Edna
McNeill, Harry V.
Miale, Florence
Munroe, Ruth
Nagelberg, Leo
Neu, Mrs. Ruth Warburg
Ochroch, Ruth
Oppenheim, Sadi
Paulsen, Alma
Piotrowski, Zygmunt A.
Proctor, Paul W.
Ritey, Hector J.
Rodan, Henrietta Itta
Rost, Mollie
Rothschild, Jacob
Sander, Emilie T.
Schacht, Leatrice S.
Schachtel, Ernest G.
Schachtel, Zeborah
Schattman, Esther Preger
Schillinger, Morton
Schwartz, Arthur A.
Schwartz, Emanuel K.
Seidenfeld, Morton A.
Shoben, Edward J. Jr.
Shor, Joel
Siegel, Miriam G.
Sloman, Else
Sobol, Albert L.
Steed, Gitel Poznanski
Steiner, Matilda
Symonds, Percival
Tolmach, Regina E.
Topping, Marion
Van West, Joan
Vorhaus, Pauline G.
Warner, Samuel J.
Weider, Arthur
Weinrebe, Claire
Weissman, Serena
Wentling, Verda M.
Wentworth-Rohr, Ivan
Werner, Kathryn
Wolf, S. Jean
Wolfson, Ruth
Woltmann, Adolf G.
Yudin, Sidney
Zucker, Luise J.

St. Albans

Aronson, Margaret R.
Williams, Helen

White Plains

Bloch, Beatrice
Hirning, L. C.

NORTH CAROLINA

Balken, Eva Ruth
Grassi, Joseph
Tillinghast, Anne W.

Durham

Borstelman, Lloyd J.
Reichenberg-Hackett, Wally

OHIO

Alden, Priscilla
Allen, Doris Twitchell
Appell, Melville
Hopkins, Edith M.
Lehrer, Ruth
Loehrke, Leah M.
Murphy, Rev. Kenneth
Schwerin, Erna

Cincinnati

Graham, Virginia T.
Ross, W. Donald
Strauss, Elsa L.

Cleveland
Barkley, Bill J.
Friedman, Gladys G.
Friedman, Ira
Gardner, Ann K.
Philipsborn, Arthur
Wallen, Richard

E. Cleveland
Baker, Corinne F.
Levine, Phyllis R.

Shaker Heights
Grossman, Carolyn K.
Hertz, Marguerite R.
Warshawsky, Florence

W. Richfield
Reinthal, Mary E.
Witzeman, Evangeline

OKLAHOMA
Kates, Solis L.

OREGON
Berliner, Anna
Cartwright, Robert W.
Higginson, Gordon K.

PENNSYLVANIA
Abrams, Ray H.
Brandon, Grace H.
Cease, Eugene
Clauss, Helen
Cohen, William J.
Dunn, Michael B.
Frear, Edgar
Greco, Marshall C.
Hammond, Eleanor
Hartzler, Ethel M.
Hirst, Carol G.
McBride, Katharine
Morgan, Clellan L.
Morgan, Olive J.
Nikel, Frank
Rappaport, Sheldon
Rappaport, Sidney R.
Raub, Edwin S.
Ruhl, Mrs. R. Ernest
Sless, Bernard
Smolinsky, Harold J.
Stern, Phyllis Glaser
Stonesifer, Fred
Strait, Bennett
Weiss, Sheldon W.

Harrisburg
Cox, Grace B.
Hocker, Margaret
Johnson, Laurence J.
Singer, Roland H.

Norristown
Howland, Allan O.
Kessler, Mable G.
Ross, M. Eleanor

Philadelphia
Baron, Louis K.
Barratt, Emily
Blumstein, Molly G.
Bowen, Barbara
Cantarow, Elizabeth S.
Cunningham, Cornelia
Elkisch, Paula
Hallowell, A. Irving
Hallowell, Dorothy K.
Jackson, Erle L.
Kleinberg, Rosalyn K.
Marker, Beatrice W.
McCloskey, E. Venita Amsler
Peters, Marie Wilson
Rosen, Esther Katz
Saltzman, Marguerite R.
Seiler, Geraldine F.
Tuft, Carlyn M.

Pittsburgh
Brosin, Henry W.
David, Henry P.
Feldman, Dorothy A.
Kreczkowski, Joseph
Ledwith, Nettie H.
Lonstein, Murray
Mallinger, Betty
Rivers, Mrs. Hubert M.
Snyder, Marguerite A.

Reading
Schulman, Irving
Weiss, Emalyn R.

Scranton
Dominguez, Kathryn
Dougherty, Margaret
Oettinger, Mrs. Malcolm

State College
Groff, Marne L.
Wilcox, George T.

Swarthmore
Cox, Rachel Dunaway
Herrman, Katherine

Wilkes-Barre
Fry, Franklyn
Fry, Martha

SOUTH CAROLINA
Wengate, Pauline

TENNESSEE
Newman, Joseph
Parker, Almena
Steen, Thomas W.

Nashville
Billig, Otto
Kirk, Virginia

TEXAS
Barry, John R.
Miller, Carmen
Mims, Jean Giesey
Wickersham, Francis Myron

Galveston
Foster, Austin
Goolishian, Harold

Houston
Josey, William E.
McCary, James L.
Vinson, David, Jr.

VERMONT
Eldred, Donald M.
Townsend, Marjorie M.

VIRGINIA
Buck, John
Caro, Elizabeth R.
Jeffreys, Alvis W. Jr.

Charlottesville
Bachrach, Arthur J.
Carter, Linda Louise

Falls Church
Colm, Hanna
Horlick, Reuben S.

WASHINGTON

Seattle
Bogardus, Helen
Kogan, Kate L.
Kogan, William S.
Levy, Ruth Jacobs
Schmidl, Fritz
Steisel, Ira M.

WEST VIRGINIA
Spencer, Betty L.

WISCONSIN
Davison, Arthur H.

Madison
Mathias, Rudolf
Robinson, Elizabeth Foster
Smith, Margaret

DISTRICT OF COLUMBIA

Washington
Broomhead, Elizabeth
Charen, Sol
Ives, Margaret
Kaplan, Norman
Mercer, Margaret
Stotz, Marion
Van Alstyne, Dorothy
Woolf, Henrietta

HAWAII
Halperin, Sidney L.

FOREIGN COUNTRIES

ARGENTINA
Schlesinger, Alicia de

AUSTRALIA
Buckle, Donald F.
Cook, Philip H.

BRAZIL
Lopes, Jose Leme
Ribeiro, Rene

CANADA
Carson, Marjorie
Dufresne, Georges
Francoeur, Thomas A.
Howard, J. W.
Poser, Ernest George
Stephens, Gordon M.

London
Brougham, Norma
Ferguson, Kingsley G.
Howe, Margaret G.

Montreal
Allen, Barbara M.
Beauchemin, Jean M.
Calvert, Margaret
Clerk, Gabrielle Brunet
Cramer, Fern J.
Dorken, Herbert Jr.
Golick, Margaret
Guindon, Jeannine
Kral, V. Adalbert
Lehmann, Heinz
Lussier, Andre
Malloy, Helga
Manuilow, Tatiana
Mindess, Harvey
Morf, Gustave
Prados, Miguel
Spindler, Joan Elizabeth
Wigdor, Blossom

ENGLAND
Earl, C. J. C.
Williams, Jessie M.

London
Ainsworth, Mary D.
Alcock, A. Theodora

FRANCE
Morize, Mrs. Andre

INDIA
Maiti, Haripada P.

ISRAEL

Tel Aviv
Elizur, Abraham
Kadinsky, D.

ITALY
Ferracuti, Franco

SOUTH AFRICA
De Villiers, David Z.

VENEZUELA
Franzetti, Rosa Padlina de